The Times and Register.

Philadelphia Medical Times. Vol. XX, No. 607. NEW YORK AND PHILADELPHIA, APRIL 26, 1890. The Medical Register. Vol. VII, No. 173.

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Clinical Lecture.

SCURVY, EMPHYSEMA, ANGINA PECTORIS.[1]

BY MORRIS LONGSTRETH, M.D.,
Visiting Physician to the Pennsylvania Hospital, etc.

GENTLEMEN.—Although some of the conspicuous features of this case have passed away, it is still very instructive in many of its aspects. The patient is a German who has been working in the iron works at Phœnixville. About one month ago he suffered an injury of his foot, a crushing from a heavy weight falling upon it. Subsequent to this injury, an eruption or redness came over this limb, erysipelatous in nature as far as we can ascertain. On his admission into the hospital, there was noticed a yellowness of the skin and conjunctivæ. There is some of this left in the eyes now, but it is merely a staining, rather than a true yellowness. His lips at that time were dry, and encrusted with sordes. His gums were dry, spongy, and showing a tendency to bleed. He was constipated, and the feces were dark and dry. He complained of severe pain extending along his right limb, from the foot upward and reaching into his side.

As we look now at his lower extremities, we find that his injury has left no mark. The skin was not broken, but was crushed and swollen. Upon admission, there were innumerable black or purplish spots covering both limbs, which have faded considerably now, however. We can see still that these spots are connected with the hair follicles and glands. Each one represents the congestion of the vessels around the base of the follicle and gland in connection with it. His skin is dry and harsh. At these spots, owing to disordered secretion, the skin died, the hair stuck fast underneath, the secretion of the gland altered until it produced this condition of ecchymosis, approaching in appearance some cases of purpura. His gums are the gums of a scurvy case—great, spongy, swollen, on the point of bleeding, and readily made to bleed; in fact, almost in a state of ulceration.

We ordinarily think of scurvy as occurring in sailors on board ship, arising from the constant eating of salt meat. I have seen, however, some of the worst cases among those who have been eating only fresh meat, among those who are employed in our mining and iron districts, and who are compelled to live for long periods of weeks and months upon but one variety of food. When scurvy appears among such men, they not only bleed freely from the mouth, but also from the bowels, and examinations reveal incrustations in the bowels, large deposits of the phosphates moulding themselves to the curves of the bowels. We have here a man who received an injury, which was followed by an erysipelatous cellulitis, thus becoming disordered, resulting in this purpuric condition. What led us to be distressed about him was a condition of phlebitis, which appeared to be developing in his leg. This does not appear so plainly now, partly because it is somewhat improved, and partly because the limb is coated over with the lead-water and laudanum which was applied to it. There are some cupping marks here, which were done

[1] Delivered at the Pennsylvania Hospital.

at the time of his injury, to relieve the resultant cellulitis. Then, in addition to his other conditions, the veins have been injured by the cupping, and this favored the onset of the phlebitis. The vein is not now tender or obstructed, but the inguinal glands are enlarged and tender. His liver we would expect to be enlarged, judging from his condition of jaundice; but, on percussing over the hepatic region, we find no liver dullness at all Why is this? The transverse colon at times, from its power of being moved from place to place, passes over the liver, obscuring the normal dullness by intestinal tympany, and, beyond doubt, this is the case here. With the freer motion of the bowels now going on, should we let this man up, the liver dullness would probably become marked. There is plenty of liver here when we get back out of the line of the colon. Ever since I found the colon in this position, my mind has been a little easier about him than before. This man was undoubtedly deeply poisoned, as all of his symptoms indicate. Here is a phlebitis following an erysipelas, and a jaundiced condition.

The man came into the hospital with a temperature of 101°, and it has been irregular since. His bowels are moving now, and his tongue is cleaning some. His urine gives the bile test no longer. What shall we do for such a case? The local condition is an important and serious matter. If we can abate the inflammatory process going on in the veins, we can prevent any of the internal organs, the liver, the lung or the kidney, from being involved. His leg is enveloped in a lotion of lead-water and laudanum, from the hip to the foot, and then covered with waxed paper to keep in the moisture and heat. There is very little use in changing this application often, for changing does away with whatever good may have been done, by exposing the limb to the cold. Doses of soda and calomel have been given him at frequent intervals. Beyond this he has been given but very little medication. What we wanted here was freedom of secretion and relief of the circulation, and this we have secured.

I showed you, on my last clinic day, a case of pleural disease where one side had a normal resonance, and the other was entirely defective in resonance, and then I showed you an Italian, where, with a normal resonance upon one side, he had a hyper-resonance upon the other, from some rupture of the lung and effusion of air. The pleural effusions in these men are now decreasing, and their condition improving.

Here is a boy, eighteen years of age, who has been in the hospital for several weeks. I would like you to notice the shape of his chest. It has a great lateral expansion, round in front, barrel-shaped, and with but little development of the muscles of respiration. Posteriorly, the deformity of the chest is very marked, and there is very little development of the extra muscles of respiration. As I percuss over this lad's chest, the sense of resilience conveyed to my fingers is very marked. In front, on percussing, I get a drum-like resonance.

I am not able to date the beginning of this young man's sickness. He says that he was compelled to stop work about a week before his admission into the hospital, which was on the twenty-first day of January. He came in with a severe cough. His fingernails were deeply blue and puffed, his temperature 103°. Since then, his temperature has fallen to normal. What he spat up was very tough, ropy, stringy mucus, not yellow in color, only tinged with yellow. Later it became a little rusty, but this was intermittent only. Listening over his chest, I find a puerile respiration, with innumerable musical scales of all varieties, fine crackling, blowing, and gurgling. We have here a condition of emphysema, on top of which has been developed a bronchitis or a catarrhal pneumonia, very little difference which. In catarrhal pneumonia we do not have the whole lung consolidated, but only in spots, and a very small patch of emphysema will cover up a patch of consolidated lung. It is therefore very difficult to be sure about our pneumonia here. The condition of the man is the same in either condition, and the treatment is the same in both conditions. The diagnosis, therefore, is not only an impossibility, but is of no value to us in our treatment. Here is a lung which is not aerating itself, and does not pass the blood through it, and so gives rise to a damming up of the blood in the right side of the heart and in the general circulation. Unless we can drive up the force behind, it is of no use to endeavor to cure the patient by stimulating his heart. We cannot improve the circulation in the lung until we can get the lung itself in a better condition. Unaerated blood will not pass through the lung, notwithstanding the use of digitalis. So here we must not try to get relief by driving the blood through an impassable barrier. In this case we were able to clear up the chest by the aid of muriate of ammonium. Under its use the secretions became thin enough to be coughed out, and better aeration of the blood took place, and though there is no alteration in the rales, we find that his condition is better. His tongue is cleaner, and his temperature has fallen. It is a complicated case, and the danger in treatment is that of spurring the heart to do a work that it cannot do. You not only do not improve the lung condition, but have weakened the heart to some extent. The essential element in the treatment of these cases is absolute rest in bed, and a careful watch of the patient to prevent any indiscretion. He should not rise from his bed, nor should there be any indiscretions in his diet, which should be moderately restricted. Relief to the intestinal mucous membrane is the first thing needed, and then to the bronchial mucous membrane. Muriate of ammonium is essential, and potassium iodide may be given to still further thin the exudation. In this case the heart's muscle was not weakened, and no medication was needed in this direction. If the circulation had been restricted, we should have bled by cups.

I show you now an interesting case. This man has been in the hospital four months, and only a few weeks before this he began to have his trouble. This commenced with severe pain in his chest. Before this he had always been well, although he had had slight attacks of rheumatism at times. He has been regular in his habits, and has not been overworked. He developed a severe pain in his chest, which shot

down his left arm. Here we have a very common history for these cases of angina. Without any known heart trouble previously, we get the onset of an angina. This man has had only two disturbances thus far. Last month he had a slight attack, and last night a severe one. He will probably go several days now without any more.

The treatment here has been three drops of a one per cent. solution of nitro-glycerine, three times daily, which was increased to seven drops, three times a day. He has also been taking some atropia, the one-hundred and twentieth of a grain, three times a day, for his respiration. He is, practically, getting well, and is now taking five-grain doses of potassium iodide. Often, conditions of the heart which we cannot detect are relieved by the use of iodide of potassium.

Original Articles.

HÆMOGLOBIN COMPOUND, OR "BULLOCK'S BLOOD IN THERAPEUTICS."[1]

By F. E. STEWART, M.D., Ph.G.,
Professor of Pharmacy in the Power's College of Pharmacy, Philadelphia; Demonstrator of Materia Medica and Pharmacy, Jefferson Medical College, etc.

I. BULLOCK'S BLOOD.

In his excellent treatise on materia medica and therapeutics, Prof. Bartholow says: "Blood is so rich in the elements of nutrition, that its employment as a food in wasting diseases need not excite surprise. Within a few years it has been much used in the treatment of phthisis, the patients resorting to the butcher's shambles to quaff the blood as it flows away." The same author goes on to say "that it improves nutrition, often to a remarkable extent, is undeniable."

It may be accepted, therefore, as proved, that the use of bullock's blood as an aliment in wasting diseases is of advantage, and that its employment is often followed by remarkable improvement in nutrition.

To those who have observed the results following the employment of bullock's blood as a therapeutic agent, no further argument is necessary. To those who have had no opportunity for observing its effects, what I have to say will prove interesting. But there are several points in connection with the use of this agent that I am sure will prove of interest to all.

My investigations, covering the use of bullock's blood as a therapeutic agent, date from the year 1877. I first inquired of the butchers in New York City what effects they had witnessed as a result of blood drinking—a habit then quite prevalent. I also inquired the same of physicians in New York, who were in the habit of sending their patients to the abattoirs to drink fresh blood. The universal testimony was that a certain proportion of patients, not too far gone for any treatment to benefit, rapidly gained weight, improved in color, and were completely cured of their ailments. These cases consisted of broken-down men and women, suffering from general wear and tear, rather than cases of phthisis. Well authenticated cases of incipient phthisis, however, are sometimes cured by this treatment, I have every reason to believe, from the nature of the testimony.

Recognizing the difficulties attending the use of bullock's blood as a therapeutic agent, I determined to find some way of preparing this article so that it might be placed on the market as a drug. My first experiments were conducted on a piece of sheet iron in the sun. I found that I could dry blood in the form of thin scales that were perfectly soluble, and quite free from taste and odor.

I now visited the great stock yards of Jersey City, where I had the pleasure of becoming acquainted with the chemical expert of the yard, Dr. J. J. Craven, formerly Medical Director in the United States Army under General Grant. I found that this gentleman had perfected apparatus for drying blood-serum, which is extensively employed for the purpose of sizing silk. The apparatus consisted of shallow tin pans resting on skeleton shelves, leveled by a spirit level, and placed in rooms heated to 110° F. by steam coils. In these pans, Dr. Craven kindly prepared some defibrinated bullock's blood, according to my directions.

In this manner was derived the drug which you will find described in the United States Dispensatory, under the name "Sanguis Bovinus Exsiccatus." This name was given it by my esteemed friend, Prof. Charles Rice, Chemist of the Department of Charities and Corrections, and President of the Committee for Revising the United States Pharmacopœia of 1880.

I graduated at the Philadelphia College of Pharmacy in 1876, from Blairs' drug store of Philadelphia, and went to New York, to take charge of a well-known pharmacy of that city. These experiments were commenced while engaged in this manner, and finished after I graduated at the Jefferson Medical College in 1879. I speak of this because my absence from New York, as a student in Philadelphia, accounts for the fact that I was not conversant at this time with some very interesting experiments conducted by Andrew H. Smith, Physician-in-Chief for St. Luke's Hospital, New York.

Being a member of the Hospital Committee of the New York State Charities Aid Association, I became very much interested in hospital construction and management. After my return to New York, I made a round of the principal New York hospitals, and, while thus engaged, visited St. Luke's Hospital. Here I found that patients were being treated by Dr. Smith with bullock's blood for supplementary alimentation. Fresh defibrinated blood was used for that purpose, and it was injected into the rectum.

I now called on Dr. Smith, and presented him with some of my own product. He was immediately interested therein, and substituted it for the fresh blood in the treatment of some of his cases. Moreover, the desiccated blood furnished a means for giving the article by mouth. For this purpose, he suggested the following formula: Sanguis bovinus exsiccatus, six drachms; brandy and glycerine, of each three fluid ounces. Of this, a tablespoonful was given as a dose.

You are probably acquainted with those "patent"

[1] Read before the Philadelphia County Medical Society.

medicines, Murdock's Food, and Bush's Fluid Food. I have been told that they are composed of bullock's blood, whisky, glycerine and egg albumen, and that they are modifications of this formula given me by Dr. Smith, and published subsequently in one of my articles on this subject.

The results of Dr. Smith's experiments with the desiccated blood convinced me that it was an excellent preparation for utilizing a valuable product. I accordingly made inquiries among my friends in the drug trade, regarding the best manner for placing the article on the market, and was referred by Messrs. Lehn and Fink, of New York, to the house of Parke, Davis & Co., of Detroit, Michigan. I accordingly placed the matter in the hands of this house, and introduced "Sanguis Bovinus Exsiccatus" to the notice of the medical profession through the columns of the *New York Medical Record.*

My article in the *Medical Record* brought forth a protest from Dr. Le Bon, of France (*Journal de Therapeutique*), against what he alleged was the claim of Dr. Andrew H. Smith and myself to have invented desiccated blood. He called attention to the fact that he had published a full description of a similar product five years previously, in the *Comptes Rendus* (1875), and that notices of the same were given in all the French medical journals. He said that it had been used very successfully in the hospitals in Paris, and especially by Prof. Bouchut at the Children's Hospital, and that it had been found most efficacious in all cases in which reconstructives are required, and succeeding where all other preparations had failed. "It is indicated," said he, "wherever iron and raw meat, or the phosphates, are useful." He also called attention to the fact that the product is difficult to prepare, and that in some modes of desiccation all hæmoglobin is lost. Dr. Le Bon refers to his product as almost completely soluble in water, giving to this a magnificent red color. From this fact I judge that his blood powder is quite similar to my own product, though I have never seen his process, and am not aware whether it has been published.

Dr. Le Bon criticised what he called the "American plan" of adding alcohol, as, he says, it precipitates the albumen. In this he is at fault, for blood will stand the addition of diluted alcohol to some where near one-third without precipitation. He, therefore, commits an error when he says that "all elixirs, or wines, sold as containing any of these essential principles of blood or meat, are an entire delusion, as they cannot contain an atom of the albumenoid principles which give to meat its nutritive properties." To be sure, such preparations as wine of beef, and wine of beef and iron, are usually made from Liebig's Extract of Beef, and contain none of the albumenoid principles of the meat; but there are other preparations sold under the name of raw foods and containing alcohol, which show the presence of a large percentage of albumen by the usual well-known tests.

Blood Powder (Guerder).—In the *Therapeutic Gazette* for November, 1883, appears an article by Dr. Guerder, of Paris, France, recommending a powder of blood, prepared in the following manner: He says, "I use only beef's blood, for sheep's blood has a disagreeable odor. The blood is taken perfectly fresh, defibrinated, cooked from four to five hours over a sea-water bath, then dried slowly in a current of warm air at a temperature of 40° to 45° C. (104° to 108° F.) The process is somewhat long, taking three days at least. The length might be somewhat abridged by pressing the paste of cooked blood between dry cloths. But this method has the disadvantage of taking from the blood mass all its soluble parts, and especially all the saline principles whose presence plays an important part in the solution and digestion of albuminous substances. I attributed, in some measure, to this preservation of the salts, the good results which I have obtained.

"The dried blood presents itself under the form of lumps more or less large and irregular, which I reduced to an impalpable powder in a mortar. This powder is then still further dried in an oven to remove the last traces of moisture and insure its safe preservation.

"The powder of defibrinated blood ought to be administered at meal time, preferably in some cold drinking water, wine, milk or coffee. It may be given to infants in suspension, in milk, or stirred well into syrup. Heat develops a peculiar taste and renders it more difficult of absorption. Patients in general take it without repugnance."

In the *Therapeutic Gazette*, for December, 1886, will be found an article by Dr. Dujardin-Beaumetz, of Paris, France, on Superabundant Alimentation and on Forced Feeding, etc., in which he recommends meat powder for super-alimentation. He says: "That as regards the nutritious value, the blood powder is superior to the powder of beef, and he also asserts that it exercises a more pronounced stimulating action on the digestive apparatus and the whole economy, and that it is impossible to say whether the excitation following the use of this article ought to be attributed to its extractive matters, its salts, or its iron, the latter existing in sufficient proportions (0.30 per cent.) to represent medicinal doses of this medicament."

Dr. Guerder has noted the peculiar stimulating and tonic action of blood, and he has tested it in comparison with powdered meat, and found it to possess peculiar advantages. He has attempted to account for its virtues by attributing its effects to extractive matters, salts, or iron. All of these ingredients produce stimulating or tonic effects, but it is my opinion that we are to look upon the hæmoglobin as the peculiar active principle of the blood, and the one which gives to it so much power to restore the system over all of the various beef preparations extant. Dujardin-Beaumetz and Debove substituted a blood powder for meat powder, in forced feeding, but did not at first obtain very satisfactory results. However, their trials met with better success when Dr. Guerder prepared for them some of the blood powder made by his process.

II. HÆMOGLOBIN COMPOUND.

The objections to all these dried powders of bullock's blood, however, is (1) their insolubility, (2) their odor and taste.

If blood is dried at a high temperature, an odorless

and tasteless powder results; but it is insoluble. If a temperature lower than this is employed, yet sufficient to cook the blood, a peculiar odor and taste develops, not found in fresh blood. If a temperature below the coagulating point of albumen is used, the resulting product is free from disagreeable odor and taste, and quite soluble; but in time the scales, or powder, become so dry as to resist the action of solvents, and then its solution is attended with difficulty. For these reasons I have instituted a great many experiments for the purpose of finding some way to preserve the blood unchanged and in its fluid condition. These experiments have finally been successful, and I now have the honor of presenting to you *Hæmoglobin Compound.*

The preparation which I have named Hæmoglobin Compound, consists of fresh defibrinated bullock's blood and extract of malt, of each three fluid ounces, glycerine and whiskey, of each one fluid ounce. This is mixed together. Of this mixture twenty drops may be given three times daily, and the quantity gradually increased until one or two tablespoonfuls are taken at each dose. It may be given undiluted, or administered with milk, or water.

Dr. F. G. Deveraux, of Kezar Falls, Maine, who has been using the compound, his attention having been called to it in a recent publication, writes that he tried the preparation on two caess very successfully, and that he thinks more of it for the purposes intended than of any article of the kind he has ever used. But he finds that if fifteen drops be mixed with five teaspoonfuls of milk, and allowed to stand, it soon digests the milk, and an unsightly mixture results. He, therefore, advises that when it is given in milk, the mixture should be administered immediately.

Prepared as I have described above, Hæmoglobin Compound remains permanent indefinitely, even when exposed to the air in a loosely stoppered bottle. I have on hand, at the present writing, a bottle of it which has been standing in my office, at Wilmington, since December 10, 1887. It has resisted the heat of two summers, yet it is perfectly good.

Shaken in the bottle so that a thin layer can be inspected as it flows away from the neck, the preparation is of a bright garnet-red color, and of a rather thin syrupy consistency. It has the "molasses-candy" odor and taste peculiar to the extract of malt. There is no appearance, odor, or taste of blood.

If it is desired to employ a more concentrated preparation, the blood may be evaporated in a vacuum pan before it is mixed with the other ingredients. This, however, adds to the expense of the preparation, without a corresponding gain, except, possibly, in special cases.

In regard to the method of administering the preparation, a few words will not be out of place. It is always well to commence with a minimum dose, carefully watching the condition of the stomach, to correct any tendency to nausea, if it exist. *Usually, the preparation is tolerated by the stomach, even when it rejects beef-tea and milk.*

The intervals at which the preparation may be taken is also a matter of importance. In cases of great exhaustion, I have employed ten to twenty drops every half hour, for three or four hours; then, one or two teaspoonfuls every three or four hours. For infants, from three to ten drops in each feeding, is the dose. This may be dropped in the bottle; or, in case the child nurses at the breast, it may be given in a little diluted milk and lime water, after the child has been fed. Ordinary cases requiring tonic treatment may commence with a teaspoonful, three times a day, and gradually increase the dose to a tablespoonful.

Hæmoglobin Compound not a Patent or Proprietary Medicine.—Before speaking of its therapeutic properties, I desire to call your attention to the fact that hæmoglobin compound is not a so-called "patent" or "proprietary" medicine. It is simply a pharmaceutical preparation, and introduced in conformity to all the requirements of science, and the demand of the code of ethics. To make it sure, that it shall go on the market free from the taint of trade-mark pharmaceutical quackery, I have placed its manufacture in the hands of my esteemed friends, Messrs. Parke, Davis & Co., of Detroit and New York. While it is a fact that I have published the true formula, and that anyone has a right to manufacture and call it hæmoglobin compound, this should not make prescribers careless. On the contrary, it should insure special care. For it is exceedingly important that animals in prime condition should be selected for killing; that the blood should be immediately defibrinated as soon as it is drawn, and at once mixed with the other ingredients, to preserve it, before it has had time to acquire any taint by exposure to the air. These are matters of vital importance, and should not be entrusted to any one except a competent person. Several times my prescriptions have been filled with tainted blood, and my reputation has suffered in consequence. I am well aware that it is not considered good taste to specify any particular make on prescriptions, but when we consider the matter, I think the importance of encouraging reputable pharmacists by specifying their products, will be admitted—not to speak of the protection it is to one's own reputation. I do not insist that you shall specify Parke, Davis & Co.'s make of this article, but I do strongly insist that for the sake of yourself and your patients, you should see to it that putrid blood is not dispensed in your prescriptions.

THERAPY.

I. Indications.—Bullock's blood has been used with success in the following classes of cases: "Persons who, by reason of want of appetite, or a languid state of the digestive functions, cannot take food;" in fever cases, "to obviate a tendency to death by asthenia, and to forestall a degree of prostration dangerous to life;" in the treatment of various infantile diseases, such as diarrhœa, mal nutrition, etc.; atonic dyspepsia; cases of serious and fatal organic diseases, either of the stomach or other organs; to support the patient and lessen his sufferings, when all hope of cure is gone; in the treatment of diseases of the eye as an adjunct to other means when the system is in a depraved condition; in so-called muscular rheumatism, associated with indigestion; in

various neuralgic affections; in surgical cases; in general weakness after fevers; in hemorrhages from any cause; in phthisis; in neurasthenia, and in convalescence; in fact, the remedy is indicated in nearly all cases of weakness or debility, no matter what the cause may be.

It is not necessary for me to speak further of indications, for they will be at once apparent to any educated physician. But there is one point of great importance, on which special stress should be placed at this time, and that is the smallness of the dose required to produce the effect. This is well illustrated in the following cases. I have in my possession notes on more than fifty cases treated with bullock's blood. Some of these cases are from my own practice, some are from the practice of Dr. Andrew H. Smith, of New York, and others are from Guerder, Le Bon, Dujardin-Beaumetz, and other French investigators; from J. Flitcher Horne, F.R.C.S. (Edin.), of England, Dr. Desiderio Varela, of Mexico; from Drs. A. Hudson, U. S. N., E. P. Hurd, Newburyport, Mass., Herrick, of the Albany Hospital, Lieler, and Allis, of this city, as well as from a number of excellent observers in various parts of the United States. Time will not permit me to read these notes. However, three cases will serve as types of a class of patients that are frequently seen in practice, and I will crave your indul gence for a few moments, while I refer to them.

A prominent business man in Wilmington recently brought me a young lady in his employ suffering from what physicians, both in Wilmington and Philadelphia, had pronounced "heart disease." Although there was a murmur sufficiently loud to startle the examiner, and although her feet were so swollen with dropsy that she could not wear her shoes, yet physical diagnosis demonstrated anæmia as the cause of her apparent heart trouble. She was entirely cured by the hæmoglobin compound, aided by two or three Turkish baths.

Taking a lesson from this case, I determined to try the same treatment in another case with a very similar history. This time it was a servant girl. The case was pronounced "heart disease" by one of the most prominent physicians in the State. Yet, three electric-vapor baths, and a ten days' course of hæmoglobin compound, restored her to health, and she is now back at her work.

The third case was reported by Dr. Desiderio Varela, of Mexico, and bears out my experience in the other two just reported. The patient was a young woman, twenty years of age. Every symptom pointed diagnostically to the nature of the disease from which she was suffering. Her color was waxen, her lips and the mucous membrane were bloodless; there was present palpitation and præcardial distress, with a tendency to syncope; the blowing murmur accompanying the first sound was perceptible at the base of the heart, and prolonged into the carotids; she complained of cephalalgia, etc., and there was superadded an utter repugnance to food. All of these rational and physical features served to establish a state of cachexia, which made it impossible to confound the anæmic condition with any other, whether studied by the analytical or the synthetic methods.

Every known preparation of iron and tonics had been tried in vain, and, at last, the situation became such that it was determined to adopt the procedure recommended in like cases by Drs. F. E. Stewart and A. H. Smith, of New York, namely, enemas of defibrinated blood. Transfusion was left as an ultimate resort.

As, however, the function of the stomach was almost entirely suspended, and the patient could only tolerate a small cup of broth and a tablespoonful of wine every three or four hours, treatment began with the injection into the rectum, every three hours, of two ounces of fresh bullock's blood, defibrinated and warmed by means of the water-bath. Contrary to expectation, constipation supervened, instead of irritation of the bowels being produced, and the treatment per rectum was continued under careful observation. A quantity of blood was therefore introduced by that channel, amounting to four or five ounces in twenty-four hours. On the third day, a favorable change was noticed—the pulse, usually much accelerated, showed signs of modification, and the patient, in a general way, impressed those about her with the idea that "life indeed was returning." About the fifth day, the stomach became tolerant of light food, and a favorable prognosis was ventured upon.

The number of enemas daily was diminished thereafter, in proportion to the encouraging evidence of reaction, and on the eighth day the patient felt sufficiently improved in strength to sit up; and by the twelfth day from the inception of this form of treatment, all rectal alimentation ceased. For some time after, however, it was deemed advisable to continue the ferruginous preparations, and her condition was such at the end of the month, that she did not hesitate to devote herself to her household duties. She had gained considerably in weight, and, since then, has not had occasion to solicit any further advice.

THE RATIONAL TREATMENT OF HIP-JOINT DISEASE.[1]

By HENRY LING TAYLOR, M.D.,
NEW YORK.

THERE is little to encourage the practice of routine in the surgical treatment of hip-joint inflammations. Nothing can take the place of a critical analysis of the patient's general state, the condition of the joint and neighboring structures, and the nature, grade, and stage of the inflammation upon which to base our management. What is required at one time is harmful at another, and no one apparatus or device will meet the varying indications in the progress of the disorder.

In the acute, progressive, and destructive stage the irritation of the inflamed tissues, aggravated by repeated and unavoidable violence, is reflected to the neighboring muscle groups, which are thrown into spasmodic action; motion at the joint is automatic-

[1] Read by title at the meeting of the American Orthopedic Association, Boston, September, 1889.

ally and instinctively restricted, but with a detrimental increase of pressure on the joint surfaces. We have an analogous condition in fissure of the anus, where the local irritation causes spasm of the sphincter, and spasm of the sphincter keeps the ulcer from healing. As in this condition stretching the sphincter abolishes harmful pressure, so in the irritative stage of hip disease, physiological rest for the joint with protection from injury are required.

There has been a good deal of discussion asto whether motion or pressure is the more harmful factor in joint inflammation. Probably either is injurious in the acute stage, and both combined still more so; but it seems to be *practically* more important to relieve pressure than to abolish motion. The instant relief from distress which follows so often on counter-extension[1] without positive fixation, the speedy improvement in the local and general condition of the patient, and the favorable course of the disease under the same treatment, are very suggestive. Counter traction no doubt lessens motion, but it does not accomplish positive fixation, even when recumbency is added, for the limb undergoes progressive changes in position. Many years of practical testing have shown that, whatever motion may be permitted by counter-traction (combined, when necessary, with recumbency for short periods), does not interfere with the favorable progress of the case, while the undesirable restriction of long periods of recumbency or of confinement to fixative apparatus is avoided.

Treatment by protective traction, however, can hardly be said to be on trial, as it has been in use for thirty years, and has made hip disease one of the most curable of the graver surgical affections. Though the plan pursued by Dr. Taylor was put on record in its essential principles in 1867,[2] and experience since then has but served to emphasize its utility, it may not be without interest to sketch the main features of the method, as now employed.

Briefly, in the acute stage the patient is put to bed and counter-traction made by means of the long splint reaching under the foot. The five-tailed adhesive plasters are so applied that the knee is protected from damage, and the leg rests in a sling, which is elevated until the small of the back rests on the bed and traction is in the line of the deformity. Lastly, six to twenty pounds' extra weight is attached to the apparatus, which is positive in its action, and protects the joint from shock or undue pressure under all ordinary circumstances. The patient is kept continuously in bed until the hip muscles are well relaxed and the deformity due to spasm overcome; usually from three to six weeks are sufficient in a tolerably advanced case. He is then allowed to get up with the splint applied, either walking on the perineal strap of the apparatus, or using crutches and allowing the leg to hang.

Traction by the apparatus is kept up continuously day and night, and the weight is still worn at night. The splint is never removed except to change the plaster, when traction must be maintained by a weight fastened to the ankle, or by the hand. Frequent manipulations of the joint should be avoided, and riding should be forbidden, on account of the jarring, which is most harmful. The patient thus goes about on his traction splint quite comfortable, and able to take the fresh air, until irritation in the joint is allayed, which usually takes several months or a year. When all active inflammation has subsided, and the healing process is progressing favorably, the hygiene of the joint requires moderate, protected use, within defined limits. We then use the supporting splint, or Dow's, with free joint at the knee and ankle, transmitting the patient's weight from the perineal strap to a steel piece in the shoe, through the apparatus, which is longer than the leg. There is about three-fourths of an inch space between the heel of the foot and the sole of the shoe, so that free locomotion, with little or no pressure on the joint, is possible. There is no doubt that the protected use of the muscles and joint, once the inflammation has subsided, benefits the local nutrition and circulation, and accelerates the reparative process, as is often shown by the drying up of old sinuses, and increase of motion at the joint and of strength in the limb.

This treatment must be kept up until the reparative process is completed, the tissues consolidated, the function of the limb restored so far as may be, and the joint prepared for the strain of unrestricted use. As the patient is perfectly comfortable and has good use of the limb, he is independent of time, and can ill afford to compromise Nature's reparative efforts by submitting the recently diseased joint to premature use. It is this careful after-treatment of the joint, during which the patient frequently goes to school or attends to his ordinary duties, that prolongs the treatment in many cases. If these patients are too soon permitted to walk about without protection to the joint, there is danger of relapse, recurrence of deformity, and diminution of motion and of usefulness of the limb.

Deformities, of which the worst are adduction and flexion, yield, when due to muscular spasm, to counter-traction, applied as described. When caused by structural shortening, or held by adhesions, special management, such as I have elsewhere indicated,[1] may be required. It is important to know that the adduction should be first overcome, with the leg raised in a sling to the full extent of the flexion present, and the back, shoulders, and head of the patient low. After adduction is overcome, flexion will be found to be already lessened.

"Our course has been reverse to the steps taken in the gradual production of the deformity, from the first slight adduction and apparent elongation of the leg in the first stages of the disease, to the extreme flection and adduction in the later stage.

"We have overcome the muscular action by exerting the extending force upon those most contracted,

[1] Traction alone, as by a weight, does not produce the same result.

[2] "Some Considerations in Regard to the Treatment of Hip-Joint Disease." *The Medical Record*, Sept. 1, 1867: and more fully in "On the Mechanical Treatment of Disease of the Hip-Joint." Wm. Wood, N. Y., 1873.

[1] "The Prevention and Treatment of Crural Adduction." *The Medical News*, March 23, 1889.

one after another, taking the steps backward to the beginning. During the different steps of the progressive reduction of the deformity above mentioned, we should not forget that our course has been taken because it is the proper course and most effectual for relaxing the muscles for the sake of relieving pressure in the joint. The gradual reduction of the distortion should be regarded as an evidence that we are successful in obtaining this muscular relaxation as a means of treatment rather than the end. During every step, and at all times, the prime object of relieving and protecting the joint should never be lost sight of." [1]

Under the plan of treatment thus sketched, the patient is usually relieved of pain at once, and I know of no therapeutic result more striking than the instantaneous relief from pain and reflex distress of properly applied counter-extension in joint disease, a result more convincing than volumes of argument, but dependent, it must be said, on perfect comprehension of the principles involved and absolute precision in their application. "Intrinsic excellence is of no avail without proper adaptation." [2]

Under rational treatment, the external pointing and discharge of an abscess is ordinarily of absolutely no moment, and does not in the least degree modify the prognosis; abscesses are fewer and heal sooner, and the final recovery is as perfect when abscesses have appeared as when they have not. Fresh abscesses are treated by free incision, thorough evacuation and closure; some heal at once. Old sinuses should be kept clean, and occasionally injected with the saturated solution of iodoform in ether, always bearing in mind that the proper hygiene of the joint and periarticular structures is the vital point in the treatment of both abscesses and sinuses. The success of our surgical procedures is absolutely conditioned by the efficiency of our management of the primary disease.

If the distress of destructive action, aggravated by repeated or continuous traumation to the inflamed tissues, is relieved by efficient counter-extension, the general health improves at once, whether constitutional treatment is adopted or not, and the effect is still more marked when protected locomotion enables the patient to enjoy fresh air and a moderate degree of exercise. Special diathetic vices will be benefited by appropriate medication.

It is thus apparent, that it is beside the point to speak of an apparatus for hip disease; the mechanical means employed necessarily vary with the grade, duration, and stage of the inflammation; the amount and nature of deformity, and the position of sinuses and other factors. Embodying the principle of rest with protection in the acute stage, and of protection with movement and exercise in the stage of repair, we must modify our apparatus to meet the necessities of the individual case throughout the changing conditions of its progress.

"In the mechanical treatment of diseases of the hip-joint, nothing should be taken for granted; no favorable determination ought to be expected which is not the result of clearly defined principles, faithfully carried out in practice. Above all, there should be no neglect of those constant watchings, which are necessary to appreciate the indications as they arise, and the making of those progressive modifications, in obedience thereto, which constitutes *treatment* in the best sense of the word. Patience, and painstaking, and perseverance must all be combined, and nothing can be left to chance. The treatment contemplates relief from pressure in the joint *till the end.* A comparatively slight pressure in a sensitive joint may have all the damaging effect that a severe blow would have in a healthy subject; and such an injury may be inflicted any hour during which the proper adjustment of the instrument is neglected. Great pains should be taken to instruct the patient's friends in their duties; and, when that is done, as little reliance should be placed on their assistance as possible. Frequent examination of the patient is indispensable." [1]

Here, as in every branch of orthopedic practice, the best conceived apparatus is of no avail, unless manipulated to produce certain definite results. It is the painstaking analysis of each individual case, and solicitous attention to details of treatment, which are required rather than the application of this or that brace, and the object of treatment is to place the joint under conditions favorable to the subsidence of the inflammation, and to restore, so far as possible, the function of the limb.

Crutches and high shoe, attempted positive fixation, and recumbency for long periods, with or without the weight and pulley, seem to me alike theoretically deficient and practically disappointing, as comprehensive methods of treatment, though not without value in an emergency, and the eclectic plan of changing from one method to another, and following nothing up thoroughly, is worse than useless. Excision is the confession of therapeutic failure.

The treatment recommended is positive and not expectant, and its keynote is continuous mechanical protection with locomotion, the kind of protection varying with the stage of the disease. It is advantageous to combine a short period of recumbency with mechanical protection in the beginning, and this should be repeated later if there is an exacerbation of inflammatory action; but long periods of recumbency do not protect the joint from damaging spasm, and are often distinctly harmful to the patient. There are many details of which the surgeon must be master at every stage, but with the necessary care and skill, and efficient home co-operation, the plan above outlined has proved its efficiency.

201 W. W. 54TH ST.

[1] "On the Mechanical Treatment of Disease of the Hip-joint." P. 48.

[2] "The Mechanical Treatment of Angular Curvature." N.Y. State Med. Soc., 1863. Dr. C. Fayette Taylor.

[1] Op. cit. P. 51.

MENTHOL IN THE VOMITING OF PREGNANCY.—

℞.—Menthol	1	gramme.
Alcohol	20	"
Simple syrup	30	"

One teaspoonful every hour.

Society Notes.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

URETHRAL FEVER.[1]

DR. J. CHALMERS DA COSTA read a paper with the above title:

For many centuries, and for various purposes, surgeons have subjected the urethra to mechanical injury. When we think of some of these purposes, of the instruments employed, of the operations done, we are not so much surprised as to what the urethra has not tolerated, as astounded in regard to what it has. Catheters, as is well known, have been in use much longer than bougies. Celsus used coarse tools of copper, the Arabians clumsy instruments of silver; Fabricius employed leather, Van Helmont an awful weapon of bone, and some other operators spiral springs covered with leather.

Bougies were apparently invented in the early part of the sixteenth century, by Aldereto, of Salamanca. They were first made of cotton wicks dipped in wax, then of linen and wax, then of lead, and then the plaster instruments of Mayern came into use. Henry III of France, it is interesting to note, gave considerable *éclat* to the use of the plaster instrument among the gentlemen of France, by returning from Poland, getting a Venetian clap, and having a subsequent gleet cured by a French plaster bougie.

When we think of some of these instruments, it seems a wonder that any one survived an attack of urinary retention or a stricture. Recall the terrible injuries inflicted by the operation for stone of Romanus and Sanctus (operation by the apparatus major). Call to mind the treatment of stricture by allowing bougies to ulcerate through it or by forcing them through, or by opening a passage with lunar caustic. Sir Everard Home followed this latter method. He tells of one man who had to be cauterized 1,258 times in fifteen years before an instrument would pass. This distinguished surgeon remarks, with apparent surprise, that he has seen people with constitutions so irritable that burning a stricture has been followed by rigors and violent fever, but the surprise is ours when he states that this has only been noted two or three times.

That mechanical injury of the urethra may be followed by positive and diverse symptoms, has long been known. Among them we may mention vertigo, faintness, feeble pulse, profound shock, syncope, respiratory disturbances, profuse sweats, epileptiform seizures, vomiting, intense headache, high temperature, and even death. Banks, of Liverpool, had one death in a few minutes, and another in four hours. Sir Henry Thompson records the death in fifty hours of a man well used to instrumentation.

Many of these symptoms need no consideration here, for we are dealing with those alone, or combined, which constitute urethral fever.

It is not uncommon to apply the term urethral fever to the most various conditions, and it seems certain that it has been positively assigned to the most different pathological states.

A great diversity of opinion exists among the leaders of surgical thought as to what this fever is, and what it springs from; and when we read their explanations we are almost forced to believe that the same name is given to different things, that unlike states have by different authors been taken as the type, and habitually argued on as if no other form existed. The combatants seem, like the knights of allegory, disputing with a shield between them, when a step forward would have displayed a truth and set contention at rest, proving each one right and each one wrong.

I will briefly exhibit a few of these opinions:

Mr. Reginald Harrison, late of Liverpool, now of London, considers urethral fever to be due to the absorption of urine or urinary constituents, by means of a urethral abrasion. This abrasion permits of the absorption of alkaloids from the urine and tissues, or leukomaines, and the products of wound decomposition, ptomaines.

Mr. J. C. Ogilvie Will, surgeon to the Aberdeen Royal Infirmary, opposes the view that this condition is due to urinary absorption, and considers it purely a reflex neurosis. The fever, however, which occasionally follows the relief of retention of urine in cases of enlarged prostate, he believes to be a symptom of sepsis arising from the admission of the germs of decomposition.

Coulston tells us that it is due to reflex disturbance of the circulation of the kidney.

Sir Henry Thompson says it is a manifestation of profound reflex nervous disturbance.

Van Buren and Keyes decide for urinary absorption.

Sir Andrew Clark believes catheter fever to be primarily a nervous condition, which subsequently may have sepsis added to it.

These citations sufficiently indicate the diversity of opinion which exists among the masters.

It is seen that three different views are held as to the cause:

1. Reflex circulatory disturbance in the kidneys.
2. Toxæmia.
3. Reflex nervous irritation.

Let us examine these views:

1. *That of disturbance of the kidney circulation.*—It has been constantly observed that after operations on the urethra there has been a marked diminution, or even suppression, of urine; that in fatal cases of urethral fever, suppression of urine is very frequently found; that after relieving retention, the same phenomenon is not unusually presented, and suppression is most usual when the kidneys are previously diseased; and so well known is this fact that Otis and others caution us to always examine the urine before a urethral operation. Again, some gentlemen have made post-mortems in cases who died after urethral instrumentation, and found pronounced kidney congestion, and this alone.

That this condition does occur is undoubted, but that it causes urethral fever, or constitutes it, is very doubtful.

[1] Read March 12, 1890.

In the first place, these symptoms may not be present at all, showing that they are not essential.

In the second place, as Banks has shown, there is something besides suppression at work, even when death occurs. The symptoms are not those of uræmia, except as to suppression, and death occurs far more quickly than can be accounted for by retained urinary elements.

This condition, then, of kidney congestion arising from urethral irritation, we would set aside as the essential element of urethral fever.

It may be present, it may be absent; it is rather, even when present, a part of the case, than the whole case.

2. *Toxæmia.*—This view is largely held, is expounded with great emphasis by Mr. Harrison, and we believe, covers a vast majority of the cases.

Post-mortem examinations prove the existence of such a thing as septic urethral fever. Such examination has, in quite a number of cases, shown injury, abrasion, or laceration of the urethra, urethral abscess or sloughing, abscess of the prostate, suppurative phlebitis, and even metastatic abscesses.

This absorption may be sudden and rapid, or gradual, may occur early in the case or after days, may be due to alkaloids which result from retrograde chemical changes in living cells, or to those which are the product of the microörganisms of putrefactive decomposition.

Mr. Harrison cites many facts to support the view of urinary absorption. He found that an internal urethrotomy, if associated with a median systotomy and the use of a large tube, was rarely followed by anything but the slightest febrile reaction, that the better the drainage the less the fever. This distinguished surgeon says that when perfect drainage is unobtainable, he uses local and general means to keep the urine aseptic, experience proving that such action very effectually, in most cases, combats fever.

The rapid development of the symptoms, in some cases, has been urged against the possibility of absorption, and, it seems to me, with considerable force; but, then, we must remember they are very rapid only in some cases.

Again, I am persuaded that the capacities of a urethra, even without an excoriation, for the rapid absorption of certain substances, has not been justly estimated. This is well seen in some reported cases of cocaine poisoning, in which, in periods varying from a few seconds to some minutes after a urethral injection of a solution of this drug, positive and characteristic symptoms announced its constitutional effects. An important confirmation of the urinary absorption view is given by the observation that the chill and fever, as a rule, follows the first act of micturition after the operation, well fitting in with the statement that, if the urine is drained through the perineum, the chill and fever are apt to be absent.

Harrison also shows us that, if we make many attempts to pass a stricture with an instrument, in cases of urinary retention, and succeed in opening the channel, fever is almost certain to occur; but if we fail, and, leaving the channel closed, aspirate, fever does not occur.

An argument urged against this view is the statement that experiment shows normal urine, when absorbed by tissues, causes no harm.

It is true that normal urine thrown under the skin of an animal will be apt to be absorbed without bad result; but the absorption takes place before any change in urine result. In the urethra, when mucous membrane is abraded, the urine (it may be in minute quantity) lodges in the pocket, and, at the body heat, along with blood and mucus and tissue débris, decomposes, and is absorbed. If the urine be sterilized, its retention does not cause fever. It seems positively proved that absorption is a usual cause of urethral fever. Believing this, the surgeon should take all just precautions.

As to the advisability of combining cystotomy with internal urethrotomy, I must solicit the views of those more experienced than myself.

In the usual run of urethral cases, protect the patient in two ways: See that the urine is aseptic, by injecting along the urethra and into the bladder $HgCl_2$, 1–5000 or solution of boric acid, and by giving quinine internally, which drug is eliminated by the urine. I would ask the advisability of drawing the urine for the first few hours after a severe urethral operation with a rubber catheter, or, after micturition, at once injecting, in spite of pain, some antiseptic fluid. We thus guard him from within.

Guard him also from without. See that the instrument is aseptic, and not greased with old septic animal or vegetable oils. For the past few weeks I have been using a preparation known as lucent glycoline, or mineral glycerine, a pure hydrocarbon, which is an excellent lubricant, and is claimed to be aseptic. Prof. Keen, of the Jefferson College, is giving it a trial, and we may soon expect a positive determination of its merits.

3. *Supposed Cause.*—Profound reflex nervous disturbance. That irritation of the urethra is capable of producing profound reflex disturbances is certain. Weaknesses, exhaustion, cold sweats, or syncope, are common, and were long ago alluded to as frequent, by Hunter and Abernethy. Irritations of the region in the neighborhood of the urethra are likewise productive of reflex disturbances, as seen by the consequences of many anal and rectal operations. The urethra is a most highly sensitive region, and, during anæsthesia, retains its sensibility longer than the conjunctiva. It has a great nervous supply coming from the sacral plexus and splanchnia nerves. Dr. Belfield made a valuable series of investigations upon curarized dogs. He proved that an irritation of the domain of these nerves, not severe enough to wound, caused an enormous fall of blood pressure and great cardiac weakness; but that if the splanchnic or sacral nerves were first divided, no such effect was observed. He proved by a most ingenious apparatus that instrumentation in man produced a like fall of blood pressure, and a like degree of cardiac weakness.

The great reflex excitability of this region, the observation that urethral fever is rarer when cocaine or ether are employed, that it often arises with almost explosive suddenness, that the symptom may be of

very transient duration, may come on before the passage of urine; that it may exist when drainage is perfect, and is more common in neurotic subjects, has led many surgeons to advocate the nervous view of neurotic fever.

We can conceive of a peripheral irritation affecting the heat center (whose existence is so brilliantly indicated in Prof. Horatio Wood's experiments in making a study of fever).

Prof. Wood states that many febrile states (as the irritative fevers) are apparently due to peripheral irritations. This distinguished observer then shows that most supposed reflex fevers are due to a toxæmia; he is not certain, however, that all are. He says:

> The history of cases of febrile reactions during teeth-cutting, and the relief afforded by relieving the tension of the gums; the fugitive fevers seen in childhood as the product of gastro-intestinal irritation; the various trifling febrile reactions of ordinary life, seem, however, to indicate a cause more trifling than blood poisoning, and to point to direct peripheral nerve irritations as provocative of febrile reactions.

It seems highly probable that the reflex effect of urethral irritation is, in some cases, the cause of the fever.

To sum up the conclusions of this paper:

1. That the existence of a toxæmic urethral fever is positively proved.

2. That circulatory disturbance in the kidney is not the cause, though it may exist, and play a great part in the case.

3. The existence of a reflex form is in the highest degree probable.

In conclusion, it seems likely that both forms could exist in the same subject, having first exhaustion from shock, and then a chill and fever from reflex irritation; then, continued high temperature, which may be preceded by another chill or chills, from sepsis.

Discussion.—Dr. John B. Deaver: I believe that so-called urethral fever is nothing more than a septic fever. I believe, again, that where all antiseptic precautions are observed, it will not be met with. In the Philadelphia Hospital, where I do many internal urethrotomies, I never have urethral fever. I prepare my patients by the administration of boric acid for four or five days prior to operation, the object being to render the urine aseptic. Evidence of renal trouble is a contra-indication for the operation, unless there are obstructive symptoms. In these cases, the urethra is syringed with a 1:15,000 solution of corrosive sublimate, two or three times a day, for three or four days before operation.

Drainage is an important point. After disturbing the muscular fibres of the urethra, we interfere with its contractile power. When the patient urinates, a certain amount is retained in the urethra. This may rapidly undergo decomposition and absorption, with the production of urethral fever. It is my practice after dilating, internal urethrotomy, and even after rapid divulsion, an operation which I do not practice, except under exceptional circumstances, to pass a full-sized soft catheter into the bladder, and allow it to remain twenty-four hours. In some twenty-five or thirty dilating internal urethrotomies, recently done at the Philadelphia Hospital, there has not been one case showing evidences of septic fever, nor has there been a chill.

In all cases of rapid dilation and in endoscopic examinations I use anæsthesia by cocaine. Two or three cases of supposed cocaine poisoning have been reported, but I do not think that the effects were due to cocaine. The solution I use is from four per cent. to ten per cent. I have never seen any ill effects. E. Hurry Fenwick, who uses a solution as strong as twenty per cent., in thousands of cases, has seen no bad effects from the drug.

Dr. G. G. Davis: Last summer I saw a case in which internal urethrotomy had been done before he came to me. The patient stated that the passage of a sound invariably gave rise to a chill followed by high fever. I simply gave from one to two drachms of paregoric and five grains of quinine prior to the passage of the instrument, and was then able to pass the instrument, without causing any unpleasant effects. While it is possible that the fever in that case was due to septic processes, yet from its immediate occurrence and short duration one would think that it was, at least in part, due to nervous influences.

Dr. J. M. Baldy: I have seen a good deal of urethral fever, but I do not believe that it is always septic. I do not mean to say that sepsis is not a potent factor, but that there are other causes than sepsis. Dr. Deaver's experience is, I think, exceptional. It appears so suddenly at times that it can be of nothing but nervous origin.

I think that a great deal of nonsense is written about poisoning by the local use of cocaine. I have known of cases where a ten per cent. solution of cocaine has been used four times a day, for ten days, in the urethra and in the nasal cavities, without any bad effect. Surely, the cases poisoned by the drug leave an idiosyncrasy for it, and are the exceptions.

Dr. S. Solis Cohen: One positive instance outweighs many negative ones. Dr. DaCosta has himself reported cases of cocaine poisoning. I have seen alarming symptoms from the local application of cocaine to the nose. I have seen a strong man fall down, as though struck a blow upon the head, from the application of a six or seven per cent. solution to the larynx. I make it a rule to test the susceptibility of the patient by the use of weak solutions, before resorting to stronger ones.

Dr. DaCosta: I feel firmly persuaded that there is such a thing as cocaine poisoning. In regard to the case mentioned by Dr. Davis, we cannot say that it was not septic. Dr. Davis administered paregoric and quinine. Quinine is supposed to owe part of its value to the fact that it is excreted by the urine, and thus has a local effect. In regard to the sudden onset being against the idea of sepsis, I am not sure that this would hold. This is supposed to be an alkaloidal absorption, and this may be very rapid. I, however, believe that some cases are due to reflex irritation.

A CASE OF PROLAPSUS RECTI CURED BY EXCISION.[1]

Reported by Ross P. Cox, M.D., Resident Surgeon to St. Agnes's Hospital, Philadelphia.

M. D., aged twenty-two years, female, single, bookbinder, admitted April 10, 1889. Family history of tubercle and Bright's disease. General condition of atony and mal-nutrition. She first observed prolapse of rectal mucous membrane one year ago, following habitual straining at stool and a relaxed state of the tissues. In consequence of recent vesical disturbance, the difficulty has steadily increased, until now every attempt to evacuate the bowels is apt to be followed by a rectal prolapse of two and a half inches, accompanied by bleeding, great pain, and, at times, temporary inability to return the extruded bowel. Recently she has been afflicted with severe dysmenorrhœa, irritable bladder, and slight prolapsus uteri. Frequent use of the catheter is required. She spends most of her time in bed, is totally incapacitated for all work, and suffers such constant pain and discomfort that life is become truly burdensome.

She was put to bed; was given a light but nutritious diet, with pepsin and pancreatin, quinine and iron; and ʒj doses of salts, or pulv. glycyr. comp., p. r. n., to maintain solubility of bowels. She was kept in the recumbent posture when the bowels or the bladder was evacuated. Various vegetable and mineral astringents were applied to the part when prolapse occurred. Hypnotics, and both dry and moist heat, were used to secure rest and relieve pain.

By these means all prolapse was prevented, first for a period of ten days, and, later, for thirty one days; when, in spite of all efforts to the contrary, the difficulty reëstablished itself in the original degree.

Conservative measures were tried for over three months, and, excepting some improvement in general health, the condition of the patient was not at all relieved. In view of these facts, Professor W. W. Keen, the surgeon on duty, determined to resect the prolapsed bowel and thus attempt a radical cure.

The patient was prepared with purgatives and enemata. Operation, July 17, 1889. The sphincter ani having been paralyzed by over-stretching, the mucous membrane was seized by volsellæ and slight traction made. The outer fold of tissue was divided circularly near the sphincter. After careful dissection it was ascertained that the prolapse did not involve the peritoneum, but extended just to its reflexion. The inner fold of bowel was then cut off at about the same level as the first incision. Several hæmorrhoidal vessels required ligation with catgut. The ring of excised bowel was two and a half inches long. The lips of the two incisions were approximated with sixteen catgut sutures, and the part was carefully placed *in situ*.

She was put to bed suffering from considerable shock. Hot bottles and brandy produced satisfactory reaction. Two hours after operation, pulse 102; temperature 97.6° F. Morph. sulph. gr. ¼ to relieve pain and procure sleep. Diet, milk and broths. Salts ʒj every six hours; catheter four times daily.

July 19, 1889. Continued the use of the catheter; bowels soluble, easy movements; less salts. Pain moderate. Pulse 114; temperature rose gradually after the operation until this morning, when the maximum 101.6° F. was reached. Fever mixture of morph. sulph. gr. ⅛; tr. aconiti gtt. ij; liq. pot. citrat. fʒiv, every four hours as required. Diet continued.

24th. Continued favorable progress; occasional use of salts and catheter; same general treatment.

27th. Examination shows wound healed; very little pain on defecating; laxative p. r. n; normal temperature established. Light diet.

August 8th. Doing well in every way. Blaud's pill t. d.

18th. Sat up, quite comfortable.

September 18th. General health much improved; no pain on evacuating bowels or bladder; dysmenorrhœa, etc, almost entirely relieved; not the slightest prolapse.

She was seen seven months after the operation; nothing which had been gained by the operation had been lost, excepting some recent dysmenorrhœa and occasional inability voluntarily to empty the bladder. General health excellent, does hard work.

[1] Read March 12, 1890.

A CASE OF DOUBLE DERMOID CYST OF THE OVARY[1]

was presented by B. F. BAER, M.D. Mrs. X. first consulted me on February 21, 1890. She was thirty-two years of age; married; had two children; oldest seven years and youngest three months.

About two years before the date at which I first saw this patient, she began to feel an uneasy sensation, and sometimes pain in the right ovarian region. These symptoms gradually increased, and the left side became involved in like manner. She then had suppression of the catamenia, and other signs of pregnancy. Her abdomen began to increase in size, and when she was advanced to the sixth month, she noticed a lack of symmetry of the abdomen, it being unusually prominent at either side, where she thought she felt an irregular, firm mass, a condition which did not exist during her former gestation. She paid no attention to this, however, except to come down from the country, where she lives, to be under the care of her former physician of this city during her confinement, fearing that all was not right. She was delivered after a normal labor at the full term, three months ago. Nothing unusual was observed during the labor or afterward by her attending physician. She remained in bed the usual time, but got up feeling weak, and showed marked evidence of continued loss of flesh. When the child was a month old, she left the city for her home, being unaware as to the existence of any abnormality in the abdominal cavity. She soon after this noticed that her abdomen was enlarging in the "middle portion," as she stated, and she was able to feel a hard mass in the distended region. She also complained of a sense of fullness in the pelvis and of pressure upon the bladder. Becoming alarmed at this, she returned to the city. When I saw her she presented an appearance of marked

[1] Read, and specimens presented, March 26, 1890.

emaciation, with the facies ovariana quite well-marked.

Examination in the dorsal position showed the abdominal walls to be extremely emaciated and relaxed. They had not recovered from the distention of the pregnancy, and as they lay in this relaxed condition an irregular mass could readly be seen in the region of the umbilicus. On palpation this was found to be irregularly lobulated, firm, almost hard at certain portions, flattened in shape, and exceedingly mobile. It could readily be moved from one side to the other, and from the central location to the epigastrium and also to the pelvis. It was rather tender upon pressure, especially at one point.

Vaginal examination showed the pelvis to be occupied by a round, smooth mass, the size of a child's head. This mass displaced the uterus forward and upward, so that the cervix was just discernible to the finger, above and to the right of the symphysis of the pubis. The pelvic tumor was firm and elastic, but not hard. It was immovably fixed, but not tender upon pressure.

I expressed the belief that the pelvic tumor was an incarcerated ovarian cyst, but I was not certain as to the character of the one occupying the abdominal cavity. Its irregular, flattened, lobulated shape and non-fluctuating character, together with its extreme mobility and the rapid emaciation of the patient, led me to fear that it was a malignant growth, possibly of the kidney. I advised that the child, which the patient was nursing, be immediately weaned, and that a laparotomy be made as soon as the breasts haddried up.

The operation was performed on March 4. After the patient was anæsthetized and lying upon the table, the abdominal walls sunk flat, and relaxed about the abdominal growth in such a manner as to make it look exceedingly malignant in its roughness and irregularity. An incision two inches in length was made, midway between the umbilicus and pubis, and the tumor exposed to view. To my delight I detected the peculiar color of an ovarian tumor. Introducing two fingers, I found it to be free from adhesion except at one point, but I could not at first find that it had a pelvic attachment, being apparently free in the abdominal cavity. After examining very closely for a pelvic attachment, I discovered that the broad ligament and Fallopian tube were lying flattened out against the posterior surface of the superior strait, being held in this position by the pelvic tumor. Putting my finger under the pedicle, I was able to trace it to the tumor, and bringing it to the incision, made myself sure that it was the Fallopian tube and broad ligament. I now punctured the tumor with a trocar, although it appeared to be almost solid, when there began to flow the peculiar pus-like and oily substance which is characteristic of dermoid cysts. After more than a pint of this semi-fluid had been evacuated, the trocar was withdrawn and the opening was immediately closed by a mass of hair, which was projected into it. Although the mass was still quite large, I was able, by manipulation and some force, to withdraw it through the small incision. The pedicle was exceedingly vascular, the veins in the broad ligament being as large as my finger. After separating this tumor, which was of the left ovary, the one in the pelvis was with great difficulty dislodged and brought up to the incision, when it also was punctured. A small quantity of fluid, of a character similar to that of the other, flowed out, when the tumor slipped through the incision. A pedicle of similar character, as to vascularity and length, was ligated and this tumor also cut away. The abdomen was now thoroughly cleansed and the incision closed, neither irrigation nor drainage being used.

The after-history has been without event, except a decided evidence of heart failure on the second day. This was controlled by active stimulation, kept up during the night. She sat up on the eighteenth day after the operation and is rapidly regaining the lost weight.

Double ovarian dermoid disease is usual. It is an interesting question as to when these tumors developed—whether before the gestation began or during it. If they existed previous to the fecundation, as they probably did, the case is one of great interest, and shows the wonderful persistence of the procreating function.

A CASE OF FIBRO-SARCOMA OF THE OVARY.[1]

B. F. Baer, M.D.: I have called this tumor a sarcoma of the ovary, but I am not sure that this expresses its true pathological character, since I have not had an opportunity to submit it for microscopic examination. It is a large, solid tumor of the ovary, however, and as such is of unusual interest.

The patient, Mrs. K., aged thirty-nine years, had one child sixteen years ago, but has been sterile since. The labor was difficult, and laceration of the cervix resulted, for which an operation was performed nine years ago, resulting in the relief of the symptoms which then existed. She has enjoyed good general health throughout her life, and has a good family history. About a year before I saw her, she became aware of the presence of a small growth, which distended in the right iliac region. This she considered to be the result of pregnancy because, as she stated, she began soon after to feel the movements of the child. She was so certain that she was pregnant, that she notified her family physician to be in readiness for her expected confinement. The growth continued to increase in size; but, when the full term had been reached, labor did not supervene. It was now learned that none of the rational signs of pregnancy, except the abdominal enlargement, had been present during the supposed pregnancy. The patient, however, insisted that she felt the movements of the child, and was confident that labor would come on. Soon after this, on February 19, 1890, I was requested to see her.

She presented an appearance of rather ruddy health, and not the slightest sign of anæmia or emaciation, nor had she felt any pain during the development of the abdominal growth.

Examination, with the patient in the dorsal position, showed the abdomen to be about as large as at the full term of gestation, rounded and symmetrical.

[1] Read, and specimens presented, March 26, 1890.

in form. On palpation, a hard, movable mass was felt beneath the abdominal wall. It was not tender on pressure, and fluctuation was absent. There was dullness over the anterior surface of the abdomen, and resonance in the line of the colon.

Vaginal touch showed the cervix to be hard. The uterus was retroverted, and the lower rounded surface of the tumor rested upon it, resembling very much the hard surface of a fœtal head. The tumor did not seem to be one with the uterus, or to grow from it, although movement of the former caused the latter also to move. When the tumor was pushed up by the hypogastric hand, the uterus could be moved by the vaginal finger, showing a probable ligamentous attachment. The sound gave a measurement of plus three inches.

In view of the rapid development of the tumor, the small size of the uterus, and the absence of menorrhagia (her menses had been rather scanty), together with the physical signs above noted, I believed the growth to be of the ovary, probably a sarcoma; but the possibility was also entertained that it might be a fibroid tumor, with a small pedicular attachment to the uterus. I advised the removal of the growth, and operated on March 6th, being assisted by Dr. H. C. Bloom, and by my brother, Dr. J. S. Baer.

When the tumor was exposed, it presented such an extremely vascular appearance that I felt I had a fibroid tumor of the womb to deal with; but, on passing my hand into the pelvis, I learned that it at least had a pedicle, which would permit of its removal, and I therefore proceeded with the operation. It was necessary to increase the incision to seven inches in length before the tumor could be lifted out of the abdomen; after which I began to apply the temporary rope clamp, but now discovered that the tumor was attached to the uterus through the broad ligament only, and that it was not involved in the growth, or that the growth did not originate in the uterus. Further examination now showed it to be of the right ovary, with the broad ligament and Fallopian tube spread out over its surface. This gave rise to the extreme vascularity of its surface. The pedicle was very short, broad, and vascular. I next clamped all of the vessels with pedicle forceps, and then cut the tumor away; after which the pedicle was transfixed, ligated, and trimmed, leaving a very large stump.

Considerable hemorrhage had occurred during the separation of the tumor. Sponges were now packed within the pelvis, and I proceeded with the closure of the incision from above downward, about twenty sutures being placed. It was now found that the pedicle ligature had slipped, and quite a smart hemorrhage was taking place; but it was soon religated, and the peritoneal edges of the pedicle were then brought together by interrupted sutures. After removing all clots, the abdomen was closed without irrigation or drainage.

The patient stood the operation well, and has made an excellent recovery, the sutures being removed on the seventh day.

Examination of the tumor shows the great extent of its attachment to the broad ligament, and will give an idea of the thickness and vascularity of the stump after ligation of the pedicle. The Fallopian tube and large vessels may be seen spread out over the tumor. On viewing the section, it is found to he quite solid and fibrous in appearance, except at the upper surface, where a small cavity is seen. This contained several ounces of semi fluid, yellowish substance, which resembled the fluid found in fibro-cysts of the uterus. It weighed, when removed, fifteen pounds.

I think we must conclude that the tumor is not a fibroid of the ovary, although it has not been examined microscopically, for I believe all operators and pathologists of experience agree that fibroid of the ovary does not occur. Sir Spencer Wells says: "A true fibrous tumor of the ovary is a thing of very rare occurrence. . . . It will be found that many cases reported as ovarian fibroids are, in reality, tumors beginning in the uterus, which overgrow and involve the ovary, so as to disguise its natural appearance, or conceal it altogether." Doran says: "I have never found a solid ovarian tumor to be formed of pure fibrous tissue. . . . All the solid tumors that I have seen removed at operations have proved to be sarcomatous or cancerous."

The question of greatest importance in this case, as in all cases where the disease is of a malignant or semi-malignant nature, is, Will the disease return? The answer depends upon the character—whether the morbid process is entirely local, or whether organs or tissues in the vicinity are involved. If, as in this case, the disease is purely local, I think experience teaches that it does not tend to recur, at least not as rapidly as sarcoma in other parts of the body. Some cases have been delayed for years, others indefinitely. Much, if not everything, depends here, as in most all morbid growths, upon the time of their removal. The longer the delay, the greater the danger.

TOMATO POISONING.—Under this title Dr. Mills (*International Dental Journal*) describes a form of recession of the gums of the superior molars, which he believes to be due to the use of tomatoes as food. The affection is most marked on the palatine surfaces. Great sensitiveness is manifested along the line of recession, similar to that of an exposed nerve. The only remedy was found to be abstinence from tomatoes. If the disease continues the teeth fall out; not usually more than one being lost in a season.

DIABETES INSIPIDUS.—In the *Berl. Kl. Woch.*, Westphal has reported the following interesting case: A puerpera was drinking five and a half to seven and a half quarts of fluid daily, and passing four and a half to five and a half quarts of urine. In order to determine which was the primary symptom, he cut her off from all fluids for twenty-four hours. He found that no urine was excreted. Hence, he concluded that it was a case of primary polydipsia. It is to be noted that this deprivation of fluids had a wonderful therapeutic effect. For the feeling of thirst entirely disappeared, and the quantity of urine remained small afterward.

The Times and Register

A Weekly Journal of Medicine and Surgery.

New York and Philadelphia, April, 26 1890.

WILLIAM F. WAUGH, A.M., M.D., Managing Editor.

THE TIMES AND REGISTER,
REPRESENTING THE
PHILADELPHIA MEDICAL TIMES.
THE MEDICAL REGISTER.
THE POLYCLINIC.
THE AMERICAN MEDICAL DIGEST.

PUBLISHED UNDER THE AUSPICES OF THE
AMERICAN MEDICAL PRESS ASSOCIATION,

Address all communications to THE MEDICAL PRESS COMPANY, LIMITED, 1725 Arch Street, Philadelphia.

THE APPROACHING SEASON.

THE recent foretaste of warm weather, indicative of the rapid onset of the summer season, has sounded the note of warning of the approaching period of trial and danger to the little ones. It will, therefore, not be altogether inappropriate thus early, knowing, as we too well do, the extreme uncertainty of our climate, to recall the measures which long years of accumulated experience have demonstrated as most valuable in preserving the health and lives of the younger portion of the population. Notwithstanding the fact that not only the medical journals of the land, but the newspapers and magazines, as well as the pamphlets and circulars gratuitously distributed by the various boards of health and obstetrical societies, urge the greatest of care in regard to the management of the young at these seasons, year after year, it would appear from the large infant mortality during the summer months that there is either a gross neglect on the part of the parents and nurse of the hygienic precautions recommended thus earnestly, or else that through some strange mishap the knowledge of such precautionary measures has altogether been withheld from a large portion of our community. Whatever the cause, however, the fact still remains, and a review of the weekly report of the boards of health, of our various cities of any size, during the months of June to September, show an appalling death rate among infants which, we feel confident, could be greatly reduced by prompt and intelligent foresight and care. Believing, therefore, that not too frequently can the attention—not only of the community at large, but of the profession, also—be directed to these matters, we take this opportunity of saying a few introductory words on the prevention of the summer diseases of children, with the intention of from time to time dealing more explicitly with the more prominent of such disorders.

The first maxim, then, which before any other must hold the chief place in the mind of parent, nurse, and physician, is that trite, but self-evident and extremely practical one, that "an ounce of prevention is worth a pound of cure." Until this becomes firmly imbued in the minds of all, every measure will undoubtedly prove inefficient. It would be just as wise to endeavor to stem the tide of Niagara as to endeavor to dam back the tide of infant mortality when all hygienic measures have been totally disregarded, and the fatal maladies permitted to lay their tenacious hold upon the helpless little lives. Regarding prevention, then, as the first requisite towards the successful management of the young during the summer season, it next becomes necessary to inquire in what ways this principle can best be put into operation.

Had we the space, columns would be required to lay down the laws of infant hygiene with any degree of satisfaction to ourselves and others. This, however, is not practicable, and we must content ourselves, therefore, with merely referring to a few of the more essential points in the careful management of infancy and childhood, and urge our readers who may be desirous for more comprehensive instruction, to peruse the valuable sets of rules which have been adopted by the various boards of health of the country. We would especially recommend those which have been adopted by our own Board, upon the suggestion of the Obstetrical Society of this city, and which may be had simply on application.

In the first place, then, we would urge, as of the utmost importance, the most rigid attention to the *diet* of the children. All injudicious articles of food—all cakes, candies, and pastry—must be strictly prohibited, while care must be taken as to the amount of vegetables and meats which it would be advisable for the child to receive. While, theoretically, milk, or milk and bread, are the ideal foods for the young, practically we often find that they cannot be tolerated exclusively, and other foods, which shall be suitable in every respect for the purposes of nutrition, as well as of the preservation of the health, must be selected. This subject of the diet of infants and children is a vast one, and one of unbounded interest. All that we can say in reference to it at present, however, is, that through the untiring efforts of specialists who have devoted lifetimes to this work, we have now foods which are in every way calculated to take the place of mother's milk, and are almost, if not equally, as efficacious in preserving the nutrition and health of the young. Of these we would especially recommend that suggested by Dr. Arthur Meigs, of this city, the formula for which recently appeared in the columns of our paper. Where cow's milk is used, proper methods of sterilization should, of course, be adopted, and the formation of tyrotoxicon be avoided as far as is possible.

After attention to the diet, the next great care should be to secure perfect *cleanliness* of the infant and of its surroundings. The daily use of tepid water and soap is of the utmost importance. If "cleanliness is next to godliness" be true of the adult, even more so is it of the infant. And not only is this to be observed of the babe itself, but of

its dress and its surroundings also. Probably more harm has arisen from the wearing of soiled and wet diapers, with the consequent chilling of the surface of the body, than from any other measure—injudicious diet excepted. Care, then, as to the dress, which should always be dry, and scrupulously clean, is paramount in the proper management of the young. If it unfortunately becomes necessary to employ the nursing-botttle, this should be of the simplest pattern, in order that perfect cleanliness of it can be assured. For this purpose nothing is better than the use of a small amount of the ordinary bird-gravel sold by druggists or bird-fanciers, which, together with a little soap and water, will make any bottle sweet and clean.

A proper amount of *fresh* air is indispensable in the preservation of the health of the young. This is something which is within the grasp of all—of the poorest as well as of the most affluent. Owing to the wise introduction into the various wards of our city of the local parks, and to the close proximity of our main park, none can have reason to complain of any lack of facilities in this direction. Fresh air and shade are at the ready disposal of all. Within easy access, likewise, is the sanitarium for invalid children, on the Delaware river, to which point during the summer months, free passage is given to all sick children and their friends or nurses so desirous. Often fresh air will do more towards maintaining the healthy condition of the young than is at first sight supposed.

We have thus mentioned but three of the main prerequisites in the proper management of the young during the hot days of the approaching season. We might likewise have considered the care required in the observance of the proper rules of nursing; in the proper regulation of the habits of the child; the need of careful sanitation and ventilation of the nursery and bed-chamber; the laws attendant upon the periods of weaning and of teething. All of these are of the utmost importance in the care of the children; but to properly bring them before the attention of our readers, it will be necessary to give them separate consideration. This we shall do as occasion affords, and for the present rest content with the few observations already made.—D.

AN ADDRESS TO GRADUATES.

IT is true that the laborer is worthy of his hire, but it has ever been the boast of your profession that you do not work for money, that you receive an honorarium and not a fee: that by so much are you better than a trade. It is no concern of mine how you are to live. That is your affair. But I do say that having chosen your calling, you ought to live up to the boast, which is the essence of your claim to be a profession. Go where you are called without thought of the reward, and withhold not your bounty from the needy, for the very reason that makes them need your bounty. Nevertheless, I tell you that by this course I do not believe that you will suffer. Plant your duty on this high plane, and you will find plenty to call who will be both able and willing to bestow the honorarium, nor will you find that the honoraria are less than the ledger accounts.

This extract is culled from an address given to the graduating class of the Atlanta Medical College, by Hooper Alexander, Esq.

It has a kind of millennial air about it that must have filled with glowing enthusiasm and an all-embracing love the throbbing bosoms of the buoyant neophytes. Though the sentences are the same silly platitudes that have ever been dealt out to medical students and medical men, they have a singularly meaningless and inconsistent sound when coming from a member of the legal profession.

Why, we ask, is the medical profession alone compelled to base the essence of its claim to be a profession on the mere fact of receiving an honorarium instead of a fee? The lawyer charges his fee, and as large a one as he can get; the clergyman stipulates his salary, if possible; the dentist sets his price; the artist, the sculptor, all who have anything to sell, be it brain-work or hand-work, sell it for what price they can get; that is, all but the physician—he alone is expected to spend a good part of his life, and much of, or all, his means in acquiring a special knowledge, which he is then to give freely to whomsoever will ask, and should a grateful patient present him an honorarium he is to be thankful.

How, like a sweet morsel under the tongue, must that expectant class have rolled the closing sentence, in which they are assured, on his "belief," that if they go anywhere, and at any time, without a thought of reward, in the end their delighted eyes will behold a collection of honoraria equalling the ledger accounts.

Stuff and nonsense! It would have been far better had Mr. Hooper Alexander warned those young men against the unbusiness-like methods of the majority of their profession, and have given them some instruction as to the best method of collecting their fees. In after life their children would rise up and call him blessed.

In a city such, for instance, as this, advice of Mr. Hooper Alexander's character is especially pernicious.

There is no need here for any physician attending patients gratuitously. If the patient is able to be out, he can go to one of the multitude of hospitals or dispensaries, where advice is expected to be free; if, on the contrary, he is confined to the house, he can send for the physician provided by the city, or for one of those provided by the great hospitals.

Physicians by going out, on call, at any time of the day or night, to people who have not paid them before, and who they know will never pay, are simply pauperizing both the people and themselves. This conduct on the part of our profession is so common that it has led to an absurd mistake among the masses. They believe that the doctor is compelled by law to come at their beck and call; and we know of a physician, too ill to get out of bed, who in the middle of the night was threatened through the window with arrest, by an irate patient on the pavement below, because the doctor would not instantly attend the

man's wife. This physician, by the way, had been attending the man's family for several years without a cent of reward; but of course this fact was of no consequence; it was his business, under legal penalty, to be well at all times, and to go when called.

With regard to money matters, a physician may, of course, be offensively insistent and persistent, just as may any other professional or business man; but that doctor who is constantly saying, "that's all right," "don't bother yourself," "take your own time," and "we'll speak of that again," will find himself constantly in narrow straits, despite Mr. Alexander's effusiveness about the honoraria.

He will also find that, as a rule, the advice which he gives so freely, will be considered by his patients as having a value equal to its cost, and his ability will be rated accordingly; and he will see himself go creeping through the world, clothed with little honor and thread-bare garments, whilst his more business-like friends, Drs. X. or Z., whirl by in their carriages, receiving on the way the salams of the multitude.

—E. B. S.

Annotations.

CRIMINAL ADULTERATION.

ADULTERATIONS of foods are, of course, frauds upon the consumer, but fortunately most of them are harmful only to the buyer's pocket-book. There are some, however, that are most dangerous, criminally so, and one of these is the substitution of the "tonka," for the vanilla bean. Recent investigations in a case of ice cream poisoning have conclusively shown that the poison was not contained in the milk, but in the vanilla, the latter having been made from the poisonous tonka bean, because it costs about one-fifteenth as much as the vanilla bean.

A CAUSE OF DEAFNESS.

THE Superintendent of the Kansas Institution for the Deaf and Dumb claims that the best known cause of deafness, aside from specific disease, is the intermarriage of blood relations. In proof of this assertion, he says that nearly 5 per cent. of the pupils who have been connected with his institution were children of either immediate or remote relationships; and these are the relationships which he mentions: Children of first cousins; children of second cousins; children of third cousins; and one child is catalogued whose paternal grandmother was half sister to paternal grandfather. Is this not running the relationship question a little too far? Could we not in any institution find probably one-twentieth of the pupils who were children of first, second, or third cousins, or whose paternal grandmother and maternal grandfather had so far forgotten themselves? It seems to us that a good one-twentieth of the population could prove their parents guilty of one of these relationships; and if so, the Superintendent's assertion has no weight.

ANOTHER EVIL OF MOUTH BREATHING.

AN interesting paper was lately read by Scanes Spicer, M.D., before the Odontological Society of Great Britain, bearing on the relationship between mouth breathing and caries of the teeth. Mouth breathing has long been known to be a pernicious habit, one that is likely to prove of much harm to the individual; but as a possible factor in dental caries the subject is one of only late consideration.

However, it seems likely that such is the case, and thus we have one more reason for insisting on the propriety of breathing strictly through the nose, and to this end removing all obstructing intra-nasal and post-nasal vegetations.

As to the cause of the peculiar physiognomy which marks the mouth breather, opinions differ. Dr. Spicer believes that "disease of the nose during growth of the organism will lead to imperfect evolution and expansion of the nasal framework, owing to the physiological stimulus of functional activity being in abeyance."

In consequence of this, certain portions of the facial bony framework retain, in great measure, their infantile characteristics, whilst others, again, that are used, develop naturally, thus giving rise to abnormal appearances. In addition to this, the same nasal obstruction which causes disuse of the nose, causes mouth breathing. The jaw dropping, the cheek tissues act as ligaments, pressing on the growing alveoli of the upper maxillæ and flattening them, the whole resulting in a marked change from the normal denture.

Letters to the Editor.

PUERPERAL ECLAMPSIA.

THE Wilson County Medical Society met April 8, and among the interesting papers read was one by Dr. Willett, of Fredonia, on puerperal eclampsia and its successful treatment with verat. viride. He and Dr. Wiley had a record of six cases to report, and the prompt and unusual success in every case was undoubted evidence of the almost specific action of his drug in controlling the terrible spasms in this terror-inspiring malady. Every physician present decided to give the remedy a fair trial on the first opportunity.

I was called to see Mrs. W., early Monday morning, one mile and a half out of town. She was a primipara, sixteen years of age, having been married at the age of fifteen. They stated that she had been very stupid for a week, and was taken suddenly with pains, followed by an intense headache. The pulse was 100° F., of a bounding throb, with œdema of lower limbs. I informed the family of the possibility of eclampsia, and began an effort to prevent further development, if possible. At noon, the symptoms were much abated, and I left, telling the husband to inform me if any alarming symptoms occurred before I got back. About four o'clock he came at full speed of his horse, begging me to get to his wife as soon as I could, as she was in a terrible spasm. Taking Dr. Jones along, we got there with all haste, and found her in a second spasm. Of course, I was anxious to try my specific, but as

I had forgotten my hypodermic syringe, and something had to be done at once, we opened a vein, and took a quart of blood, using chloroform freely.

She came out of the spasm, but remained comatose. Before I got to use the syringe, she had had two more hard spasms, and again dropped into the comatose condition, with that peculiar stertorous breathing.

At this time she had passed the ordeal of four or five minor spasms, never at any time regaining consciousness. In this condition she received twelve drops of Norwood's tincture verat. viride. In twenty minutes her pulse dropped from 100 to 78.

In half an hour after the first dose I gave her twelve drops more. Again her pulse dropped; this time to 56. In a few minutes she opened her eyes and recognized her friends, and was unconscious at no time during her labor, which was accomplished with but little difficulty, although the child was still-born.

Here we have positive evidence of seven cases of this awful malady, giving way to a hypodermic application of this drug, as surely as malaria ever did to quinine.

I am sure that as other physicians try this remedy, it will as surely give them immediate relief from a condition dreaded by every one, as it has for me and others.

J. D. KELLY, M.D.

BUFFALO, KAS.

Paris Letter.

GENERAL TREATMENT OF SYPHILIS BY EXTERNAL APPLICATIONS.

FOR many reasons, it is important to be able to substitute some other method of medication in syphilis to the usual ingestion of the mercurial salts by the mouth; something more simple, and less irritating to the digestive organs; and this is the reason why, after careful trial had been made of all the newer methods of administration of mercury, that most authors have lately advised the use of mercurial ointment. But here, again, several objections have been made. First of all, it is a dirty method, and it had to be renewed every day, while the last part used had to be washed. This led to patients not caring to attend to their treatment strictly, and for hospital patients to shirk whenever they could. Only at watering-places, like Aix La Chapelle, where the bath men rub the ointment into patients before their daily bath, can this treatment be thoroughly carried out. As it is important to treat these patients not only thoroughly, but also in spite of themselves, the hypodermic injection of insoluble mercurial salts has been practiced; but the pain this method caused, not to speak of the abscesses, or, at least, hardening of the part injected, has caused the almost complete cessation of this treatment. To turn, as it were, the difficulty, Prof. (agrégé) Quinquaud makes use of, in his hospital service, a *calomel plaster*. Calomel, applied to the skin, is transformed, little by little, into corrosive sublimate, by the chloride of sodium in the sweat, so that the patient has a permanent supply of bichloride of mercury by wearing these plasters.

It is prepared as follows: Diachylon plaster, 800 grammes, to calomel, 300 grammes. The mixture is spread out thinly on a cloth, which is cut up into pieces of ten by twenty centimeters for men; and in pieces of ten by ten centimeters for women's use. This is applied on any part of the body where the skin is thin, and kept on as long as possible. The absorption of the drug by the skin is proved by the examination of the urine, which shows mercury, and also by the fact that the syphilitic manifestations are rapidly improved, and salivation can also be produced. This is easy to prevent by stopping the use of the plaster in time, or by using it in smaller pieces. This new way of using an external method of treatment that cannot be shirked, and also is no bother to patients, presents considerable advantages that are seen at once, and we shall be able later on to give more exact details of the results of its use at the St. Louis Hospital here.

HYPODERMIC INJECTIONS IN THE ADYNAMIC PERIODS OF MALADIES.

The physician who stands before the bedside of a patient who is in an adynamic state is often puzzled what to do. On one hand the relations of the patient insist on something being done, and the patient himself seems passing away. Prof. Peter, in a late clinic, speaking of the influenza and the weak states that followed it, particularly the cases in which pneumonia ensued, said that he thought that injections of ether acted marvelously well in such nervous complications, and Prof. Jaccoud, in speaking on the same subject, said that he would use injections of ether as soon as the patient seemed to be failing; and he continued: "I should advise that you employ injections of ether under the skin early in these cases, as soon as the patient seems to weaken, and I should do it in a methodical manner. Make one every morning and evening, and, if the patient gets weaker, do not hesitate to make two injections, night and morning, from the third to the sixth day, in the cases of pneumonia that you see following the 'grippe.'" The hypodermic injection of ether is *very painful*, and other authors think that it should be reserved for the adynamic periods of typhoid fever, and other extremely serious cases. Dr. Roussell proposes the hypodermic injection of arseniate of strychnine, which, he claims, produces as good an effect as anything else, and is not painful to the patient.

We had Dr. Henri Huchard in consultation with us in cases of pneumonia, and he proposed hypodermic injection of caféine, according to the following formula, which seemed to produce good results. The precaution must be taken to use the solution with a large needle, and it may be injected as often as every three hours, the usual syringe-full each time:

R.—Caféine . . . . . 4 gr.
Sodii salicylate . . . . . 3 gr., 10 centgr.
Aqua . . . . . 6 gr.
M.—And make the solution by heat.

NITRATE OF COCAINE IN THE TREATMENT OF GENITO-URINARY DISEASES.

Nitrate of silver is of such constant use, and of great benefit in the above troubles, that all will be

glad to know that its principal defect, that of causing great pain, can be now obviated by using the nitrate of cocaine. Dr. Levaux, in a case of gonorrhœal urethrocystitis and in acute gonorrhœa, has been able to employ a solution of two per cent. nitrate of silver, and use what is called "abortive treatment" for five minutes at a time without causing pain, and the period of reaction, which is usually so painful in such cases, was almost painless. In the first case there was no bladder irritation, although the injection was made without a sound, and no pain was felt. The operation was conducted as follows: A continuous washing out of the urethra with a four per cent. solution of boricated water was first done, and then the following solution was used:

℞.—Nitrate of cocaine,
Nitrate of silver . . . . . āā 1 gramme.
Aqua destillata . . . . . 50 grammes.
M.

This was retained five minutes, and then a renewed washing out with borax-water was done, and the patient advised to keep quiet for the rest of the day. The nitrate of cocaine can be prepared by mixing a solution of hydrochlorate of cocaine with a solution of nitrate of silver, when a double decomposition takes place, with formation of a precipitate of chloride of silver, and the nitrate of cocaine remains dissolved. Filtering takes away the chloride, while the *filtratum* is employed. This nitrate of cocaine should replace the hydrochlorate of cocaine, as it is found to produce a complete anæsthesia of the urethral canal, even when mixed in the proportions given of nitrate of silver, and it is probable that its use will rapidly extend to other branches of practice—for instance, gynæcology.

ON THE POPULAR TREATMENT OF SKIN DISEASES.

Dr. Grellaty (of Vichy) has some interesting remarks on this subject, that will show the popular ideas in France. Many people here fancy that urine has a wonderful curative property in skin troubles, and mustard plasters, with other methods of vesication, are quite popular. They are supposed to draw out the "*humors*" of the body, but really do leave some annoying cicatrices that are far from being a compensation for the loss of the "*humors*."

There is also a great abuse of fatty matters in the treatment of skin diseases, even by physicians, and poultices, as well as hot herb drinks, are bestowed *ad libitum*. The moment an attack of acne, eczema, or impetigo is seen, some one rushes off to get an ointment which is more or less old and decomposed, and only increases the irritation and helps along the erythema. Eczemas are always irritated and brought into an acute stage by fatty bodies, when they have the slightest form of fermentation in them, and even when they have not as yet undergone decomposition. In some persons, who have delicate skin, the application of a linseed poultice which is not just fresh, or which has too much oil in it, will produce an irritation of the skin, and, the more irritation is produced, the better the public like it, as they then triumph while saying, "*It is the bad blood coming out!*" Vaseline is, of course, a great progress in the direction of improving this state of things; but it has been proved that it is very little or not at all absorbed. Experiments made on pig-skin drums show that there is no penetration of vaseline after repeated friction, so that some form of animal fat has to be used when penetration is desired. Lanoline seems to fill this desideratum, and should be employed. It can be deduced from this, that it would be well to employ vaseline when we do not wish to have absorption—when we are acting on the parasites, for instance—and a large dose of mercury can be employed as long as the skin is not broken. As to the various herb drinks so much employed in France, even by doctor's prescription, as "*depuratives*," they are useless. The word sounds well, and the idea that drinks containing bitter herbs and those supposed to have an action on the sweat glands, while at the same time they have purgative effects, are cleansing and curative, is false; they are, to say the least of it, useless, and have no action of purifying the blood and curing indirectly skin diseases, so that these false notions should not be encouraged by competent modern physicians.

AUTOGRAPHISM AND STIGMATES.

While speaking of skin affections, we must mention an interesting case we just saw in Prof. Fournier's wards at the St. Louis hospital; it relates more directly to nervous pathology, and was recently the object of an article by Dr. Mesnet, from which we will take some extracts.

But first, to speak of the case seen at Dr. Fournier's clinic, last Tuesday. The Professor said that before presenting the next patient he would say what his trouble was, as the patient had begged him not to tell the real affection to the class, as it might get around and destroy his prospects; but Dr. Fournier thought best to tell, though not before the patient. The man was about forty years of age, blond and pale, but strongly built, looking, indeed, like an athletic person of great strength of muscle, short and stout; his history was that some months ago he presented himself at one of the hospitals with a fever, cold in the head and chest covered with an eruption. The case was diagnosed as measles, and he was given great care and good food and attention, the fever went away in a few days and he suddenly left the hospital and went to another, with large, red marks all over his body, and the case was considered scarlatina; as his throat was still sore, he seemed to get worse here, and the doctor thought it must be small-pox, and he was about to be sent to the small-pox hospital, when Dr. Besnier was sent for and pronounced the man to be a "*simulateur*." This was found to be true; the man was able to produce, in a few moments, on his skin, all the well-known signs of almost any skin disease. He was then shown to the class, and with the point of a stick or pencil he produced all sorts of skin diseases. Dr. Fournier made the word *Satan* on his back, and it stood out in great welts, like urticaria, for a long while. Dr. Mesnet says in his article on this curious pathological fact of a physiological order, that it is a very old and well-known one, as it belongs to sorcery used in the sixteenth and seventeenth centuries. At that time the "demon" was all powerful

in all the acts of life and the world, and the poor nervous patient was believed to be "possessed" of the devil, and hundreds of them were condemned to death. The examination of these persons, accused of sorcery, was conducted on the idea that the demon marked his presence in a person by some sign on the surface of the skin; a thickened spot, or any insensibility to pain (our modern anæsthesia) was a sure sign, as the poor patient did not even feel the pain of the pinching of tongs; when, however, there was nervous laughter, and some convulsive tic, the case was certain, and certainly when the judge could mark Satan on the skin, and it stood out in flaming characters, it was quite enough to condemn the patient to death. Dr. Mesnet gave the history of four of these patients, in whom the phenomenon was always produced in the same way. One was a case of hemianæsthesia of the left side, and if a pencil tracing was made on the skin on that side, she did not feel it, and yet the characters traced became salient, just as much as on the right side. Autographism is a reflex act that must not be confounded with the meningitic redness, nor with the marks produced in typhoid states, as they have nothing in common but the fact that they can be produced by the pressure of an instrument, or by pinching the skin. Urticaria is more like autographism, which has been called *urticaria factice*, or artificial, but differs in the fact that all these patients are hypnotisable, and it would seem that the skin phenomenon seen depends on some brain lesion that we cannot make out. In other words, the capillary circulation is altered in the skin, possibly from some profound trouble of the capillaries in the cerebral circulation.

You will have already noticed the death of Prof. Trelat. There are now two vacancies in the surgical professors at the Paris Faculty. Prof. Richet resigned from age (over seventy-five) and his place will be taken by Dr. Tilleaux, now surgeon to Hotel Dieu. Prof. Trelat's place will soon be filled by the nomination of Dr. Le Dentu. THOMAS LINN, M.D.

Book Reviews.

LAKE CHAMPLAIN AND ITS SHORES. By W. H. H. MURRAY. Boston: DeWolfe, Fiske & Co., 365 Washington Street. Cloth, 12mo.; pp. 261.

In the preparation of this volume, the author desires to call attention to the historic events which occurred in this region. He states that this is simply a suggestion, embracing an outline of a fuller work, for which he has for years been collecting materials, but which, for commercial reasons, is not to be published. We trust that this conclusion is not final, and that Mr. Murray's publishers will give the public what must prove a valuable work. The volume before us contains chapters on Out-door Life; The Traditional and Historic Period; The Great National Park; Lake Champlain and its Yachting Facilities; Historical Reminiscences, and The Game Fish, and Fishing of Lake Champlain. The book is written in Mr. Murray's vigorous style, and will doubtless awaken much interest in the Champlain region and its history.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS. Vol. VI, No. 1. April, 1890.

Contents: The Human Foot; Its Form and Structure, Functions and Clothing. By Thomas S. Ellis, M.R.C.S. Modern Cremation; Its History and Practice. By Sir H. Thompson, F.R.C.S. Aphasia. A contribution to the subject of the dissolution of speech from cerebral disease. By James Ross, M.D., LL.D.

Pamphlets.

Throat and Nose Affections in Children. By Scanes Spicer, M.D. Lond. In this paper the author discusses such afflictions in relation to certain derangements of sleep, temper, spirits, energy, and to intellectual power and other brain functions, which they produce, citing a number of cases in proof of his argument.

Sixty-seventh Annual Report of the Mercantile Library of Philadelphia.

Thirty-fourth Annual Report of the Executive Committee of the Hartford Hospital.

Mineral Springs of the United States. By Judson Daland, M.D. Those springs, the waters of which have been analyzed, the author has grouped under the appropriate headings of Diuretic, Iron, Carbonic Acid, Purgative, Alkaline, Saline, Calcareous, Sulphuretted and Hot Springs, and under each heading a few of the therapeutic indications are given. A large number of mineral springs is also mentioned, which have not yet been analyzed, and some of which may prove of much value. In looking through the pamphlet, one is astonished at the multitude and variety of mineral springs which this country contains.

Sketch of the late Dr. J. Edward Turner, the Founder of Inebriate Asylums. By T. D. Crothers, M.D.

The third number of the Lehigh Valley Medical Magazine is before us, and, like the preceding, is a credit to the profession of Easton.

Twenty-second Annual Report of the New York Orthopædic Dispensary and Hospital. A most commendable feature in the report of this flourishing institution is the claim that by means of a complete system of investigation its management is able to weed out that bane of hospitals and dispensaries—patients who are able to pay. Other institutions of the kind would do well to copy this feature, at least, of the Orthopædic Dispensary of New York.

Tobacco Amblyopia. By Leartus Connor, M.D., Detroit, Mich.

The Medical Digest.

TUMOR OF THE PANCREAS.—Waldo Briggs, M.D. (*St. Louis Med. and Surg. Jour.*), records a case of successful diagnosis and removal of a sarcoma of the pancreas. The patient, a German woman, of forty-five, had a history of occasional spasms of the stomach, extending back one year; chronic gastritis, with constant vomiting, the food often tinged with blood, increasing emaciation, abdominal enlargement dependent on ascites. At this time she came under the surgeon's observation, who, after removing the fluid, which contained small bodies showing hydatid degeneration, found a smooth, hard tumor in the epigastric region, extending over to the hypochondrium. From the symptoms already mentioned, along with the fact that the tumor moved but slightly on respiration, he concluded it to be located in the pancreas. A median incision was made, and the growth removed, including the tail of the pancreas. The patient made a good recovery, and is now attending to her duties.

RUSSIAN NOTES.

Translated by C. D. Spivak, M.D.

The first number of the *Bolnicknaya Gazeta Botkina* (Botkin's Hospital Gazette) has made its appearance. It is edited by the disciples of the late Sergei Petrowitch Botkin, and is intended to carry on and continue the work which was begun in the *Weekly Clinical Gazette*, edited by their beloved teacher.

It is the intention of its six editors (Alishevski, Vasilyev, Sokolov, Sirotinin, Nechayev, and Botkin), all of whom are chief physicians of large hospitals, to make the paper principally the organ of municipal hospitals. In their preface they quote Botkin's editorial in the *Weekly Clinical Gazette*, in which he said: "Is it possible that in a city having ten thousand sick persons at a time, there should be no cases worthy of recording? As such a supposition is improbable, I take the liberty to think that the real cause of this phenomenon lies in the lack of appreciation of the great importance of casuistry, forgetting that casuistry is the foundation of practical medicine and the best school of the practitioner; good casuistics may substitute clinics where practical medicine is taught." Further, they quote the following passage: "The interest and instructiveness of certain cases does not depend so much upon their rarity, as upon their truthful description and the greater or less elaborateness; a simple case, well elaborated, will contribute more to medical science than a pathological rarity."

H. N. I. Sokolov gives a graphic description of the malady to which Prof. Botkin succumbed. The history of the sickness, besides depicting the heroic nature of Botkin as a priest of science, bearing his ailments with fortitude, is also of great interest from a scientific point of view.

S. P. Botkin commenced to suffer from bilious colic when he was twenty-five years old. The great physiologist I. M. Syetchenev was the first to arrive at a true diagnosis of the disease—cholelithus. Having examined the urine, after a severe paroxysm, he discovered biliary pigments, and afterwards the stone itself was found in the excreta. For fifteen years he visited Karlsbad-baths. Since 1872, owing to certain circumstances, he ceased to go there, and treated himself with alkaline waters and the effervescent powder known as Botkin's mixture. For ten years the attacks were mild. Last fall the attack became severe, simulating those of his younger days, and he would remark jokingly, while suffering excruciating pain: "My youth has returned."

Botkin suffered during his life from the following acute diseases: 1863 he had typhus, which he contracted in his clinic; in 1870, diphtheria; 1875, pleuritis; 1877, typhoid fever. In 1882, he had the first attack of angina pectoris, which lasted for three days. No abnormalities in the heart or lungs could be detected, except the pulse, which was somewhat rapid. At the end of the attack a distinct precordial murmur was audible for two days. Botkin explained the phenomenon as a reflex action of the diseased condition of the liver and kidneys. He also ascribed it to poisoning by tobacco-smoke, and since that time abandoned the use of cigars. In 1886, the attacks returned. On examination no serious abnormalities could be elicited. Breathing became labored. In 1887, he first noticed blood in coughing, which troubled him greatly. In 1888, he passed a painful winter, and, on the eve of his going to Finland, a physical examination was made with the following results: A dicrotic rapid pulse; heart impulse weak; long systolic murmur at the apex, with an exceedingly weak first sound; diminished resonance posteriorly to the right. Liver enlarged and painful. It was evident that the musculo-nervous apparatus of the heart was greatly impaired. In Finland he was under a course of hydro-therapeutic treatment, which greatly relieved him. After his return his friends advised him to abstain from lecturing and other clinical work, but he never took heed. He never missed one lecture during the session of 1888 and 1889; from eleven in the morning till three in the afternoon he remained in the clinics and ambulatories, visited many hospitals, for hours conversed with the young resident physicians; organized the third convention of physicians; presided at the meeting of the Society of Russian Physicians, and took a lively interest in municipal hospital affairs. In the latter part of August, while in Paris, another physical examination was made, with all the above symptoms, and in addition the first heart sound was absent, pulse compressible, scanty urine and dropsy of the lower limbs. Botkin, though fully believing in the accurate diagnosis, did not want to adopt cardiac remedies, insisting that the cause was not in the heart itself, but in the nervous reflexes of the irritable condition of the biliary ducts, and also to the sudden cessation of the use of tobacco, which brings the same state as when a morphine eater is deprived of his usual dose. Milk diet and sea bathing were adopted with apparent success. "No digitalis for me," he would say. On the sixteenth of October a severe attack recurred, with bleeding and all the objective symptoms intensified. So firm was his belief that the cause of the trouble was due to retained calculus in the bile ducts, that he thought of submitting himself to an operation. Lawson Tait was sent for, but refused to operate on account of the state of the heart. Botkin assured Mr. Tait that if he was afraid to use chloroform, he could stand the operation without an anæsthetic, which, of course, was refused likewise. On the twelfth of December, at noon, Botkin died, at the age of fifty-seven.

The autopsy, which is minutely described, revealed the following: *Lungs*, in the lower part of the right lobe an induration, the size of a small pear; the heart in a state of fatty degeneration; the liver enlarged, the gall-bladder containing cholesterin stones numbering 246; deposit of fat in the kidneys; the alimentary canal covered with a thick layer of mucus.

A New Hæmostatic is announced in the dried fibres of a plant growing in Java, called Penghawar Jambi. It was introduced by M. Kulig, and is used by Michelson, of Kœnigsberg, in nasal operations under the name of Penghawar wadding. This is a combination, of equal parts, with cotton-wool (made by Hartmann). It is more elastic than the latter.

—*Therap. Monatschefte.*

Medical News and Miscellany.

FRENCH surgery has met with a great loss in the death of Trelat.

THE Lactopeptine Medical Annual for 1890 is a very pretty production.

INFLUENZA caused one hundred and sixty-four deaths in the German army; twenty-five being due to suicide.

THE *Medical Record*, of April 12, gives full information to those contemplating a visit to the Congress, concerning steamers, and other matters.

THE Arsenico-Ferric water of Levico is recommended highly by Westcott (*Lancet*) in anemia, chlorosis, general debility and chronic skin diseases.

ST. PETER'S Hospital, Helena, Montana, has an arrangement which certainly speaks well for the harmony of the profession in that city. Each patient who enters is permitted to choose his own physician.

LEGACY TO THE POST-GRADUATE MEDICAL SCHOOL AND HOSPITAL.—Among the legacies of the late Hon. Daniel B. St. John, of Newburg, N.Y., was one of ten thousand dollars to the above named institution.

CHICAGO POLICLINIC.—Dr. N. Senn and Dr. Chr. Fenger have been elected regular professors of surgery in this institution. In addition to clinical work, they will present a special course in abdominal surgery twice yearly.

DR. W. T. BELFIELD, 612 Opera House Building, Chicago, Ill., U. S. A., respectfully solicits information concerning unpublished cases of operations upon the prostate, especially for the relief of the so-called hypertrophy of the organ.

IN chronic rheumatic sore throat, Ingals (*Jour. of Laryng.*) says that he derives the most benefit from phytolacca and salol, combined with a laxative, and sometimes iodide or bromide of potassium. The phytolacca is given in doses of two to four grains; the salol up to ten grains.

DR. W. F. HUTCHINSON has returned from a trip to the West Indies, with renewed health and vigor, and our readers may expect again his "Italian and Spanish Notes," as well as some account of his voyaging in the mid seas. Dr. Hutchinson believes that the Antilles were located where they are, to serve as sanitaria for all the Americas; and in this we most heartily agree with him.

SEI-I KWAI mentions several methods of treating elephantiasis in Nagasaki. One is to wrap a heated stone in a handkerchief wet with an infusion of the seeds of Nira (a sort of leek), and apply to the diseased part; the insect comes out and the inflammation ceases. Plunging the legs in the red fluid floating on the water over a freshly-manured rice-field is also recommended. The disease is attributed to an insect, called the Koemuski, which stings and penetrates the skin. It is two inches long.

THE University Hospital is undergoing a renovation, and many improvements are being made to enhance the comfort and well-being of the patients. Prominent among the new features is the autopsy table, the finest in the country, now being specially prepared at a cost of $500. The total cost of the alterations will amount to about $10,000. They are made under the direction of Dr. John S. Billings.

THE *Archives de Neurologie* states that in the Boston rubber works, where great numbers of females are employed, these women are in a continual state of ebriety from the inhalation of the fumes of the naphtha employed. On being questioned, the girls declared that they had become so habituated to this strange form of intoxication that it was a necessity to them, and that the pleasurable sensations induced excelled those of opium or hashish.

The authority for this singular statement is not given.

THE CITY'S HEALTH.—During the week ending April 19, the principal causes of death were as follows:

Apoplexy	10
Casualties	11
Consumption	66
Convulsions	14
Heart disease	22
Typhoid fever	13
Inflammation of brain	27
" " bronchial tubes	14
" " lungs	49
Inanition	10
Marasmus	12
Measles	10
Old age	11

The Doctor, Mr. Welles' sprightly journal, tells a story of an advertiser in the *Dietetic Gazette*, who, after one of the large issues of sample copies (86,000), received so many requests for samples of his goods that his stock was exhausted, and he had to go out of business. These large issues of sample copies are very valuable to those whose business requires sampling; but their effect on the cash sales, which are the ultimate object of advertising, is a different matter. The steady circulation of a journal among its paid subscribers is, we believe, the most profitable; though, when a new thing is being marketed, the widest publicity is desirable. We have in preparation a large edition of this journal. For this we do not propose to make a special canvass for advertising, as it is intended specially for our regular patrons' benefit. Due notice will be given, that the copy may be specially prepared for the large issue.

AT the recent examination for graduation of the Medico-Chirurgical College, the following were the written examination questions on practice:

1. Diagnosis between yellow fever and bilious remittent fever.
2. Causes, symptoms, and treatment of ammoniacal urine.
3. Causes of hemorrhage of the bowels, with diago sis and treatment of each.
4. Give the forms of hepatic enlargement, with diagnosis.
5. Describe a case of mitral insufficiency, giving causes, diagnosis, course, pathology, and treatment.

6. Describe the various forms of intestinal obstruction, giving diagnosis and treatment.
7. Diagnosis between acute delirium and acute mania.
8. Describe the auscultation signs of acute pneumonia (lobar), in each of its stages.
9. Diagnosis between ordinary and Jacksonian epilepsy.
10. Diagnosis between paralysis agitans and multiple sclerosis.

At a special meeting of the Board of Trustees of the Medico-Chirurgical College, which was called by the President, Dr. Pancoast, to take action upon the death of Prof. Henry H. Smith, M.D., F. M. C. C., etc., after many expressions of regret at the loss of our honored Fellow, on motion, it was unanimously

Resolved, That the Board of Trustees of the Medico-Chirurgical College have heard with sincere regret of the death of Prof. Henry H. Smith, M.D., an honored Fellow of the college.

Resolved, That they desire to put on record their high appreciation of his manly character, his patriotic record, his professional attainments, and the loss that his lamented death has caused to his many friends and to the medical profession.

Resolved, That a copy of these resolutions be signed by the proper officers of the Board of Trustees and sent to his family, and published in the medical press.

To Contributors and Correspondents.

All articles to be published under the head of original matter must be contributed to this journal alone, to insure their acceptance; each article must be accompanied by a note stating the conditions under which the author desires its insertion, and whether he wishes any reprints of the same.

Letters and communications, whether intended for publication or not, must contain the writer's name and address, not necessarily for publication, however. Letters asking for information will be answered privately or through the columns of the journal, according to their nature and the wish of the writers.

The secretaries of the various medical societies will confer a favor by sending us the dates of meetings, orders of exercises, and other matters of special interest connected therewith. Notifications, news, clippings, and marked newspaper items, relating to medical matters, personal, scientific, or public, will be thankfully received and published as space allows.

Address all communications to 1725 Arch Street.

Army, Navy & Marine Hospital Service.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, U. S. Army, from April 3, 1890, to April 17, 1890.

By direction of the Secretary of War, leave of absence for six months, on surgeon's certificate of disability, with permission to leave the Division of the Pacific, is granted Captain Arthur W. Taylor, Assistant-Surgeon. Par. 10, S. O. 78, A. G. O., Washington, April 3, 1890.

By direction of the Secretary of War, the leave of absence granted Major Robert M. O'Reilly, Surgeon, in S. O. 241, October 16, 1889, amended by S. O. 252, October 29, 1889, both from this office, is extended one month. Par. 30, S. O. 81, A. G. O., April 7, 1890.

By direction of the Secretary of War, the leave of absence granted First Lieutenant Nathan S. Jarvis, Assistant-Surgeon, in S. O. 34, March 20, 1890, Department of the Missouri, is extended fifteen days. Par. 22, S. O. 81, Hdqrs. of the Army, A. G. O., April 7, 1890.

By direction of the Secretary of War, Captain Marshall W. Wood, Assistant-Surgeon, is relieved from duty at Fort Randall, South Dakota, and will report in person to the commanding officer, Fort Meade, South Dakota, for duty at that post, reporting by letter to the commanding general, Department of Dakota. Par. 24, S. O. 82, Hdqrs. of the Army, A. G. O., Washington, April 8, 1890.

By direction of the Secretary of War, the following changes of stations of officers of the Medical Department are ordered:

Lauderdale, John V., Major and Surgeon. From Fort Davis, Texas, to Fort Ontario, New York.

Skinner, John O., Captain and Assistant-Surgeon. From Fort Ontario, New York, to Fort Davis, Texas.

Perley, H. O., Captain and Assistant-Surgeon. From Fort Wayne, Mich., to Fort Mason, California.

Burton, H. G., Captain and Assistant-Surgeon. From David's Island, N. Y., to Vancouver Bks., Washington.

Hopkins, Wm. E., Captain and Assistant-Surgeon. From Fort Mason, Cal., to Fort Columbus, N. Y. Harbor.

Stephenson, Wm., Captain and Assistant-Surgeon. From Fort Verde, Ariz., to David's Island, N. Y.

Willcox, Charles, First Lieutenant and Assistant-Surgeon. From Fort Columbus, N. Y. H., to Fort Bowie, Arizona.

Par. 2, S. O. 83, A. G. O., Washington, D. C., April 9, 1890.

By direction of the Secretary of War, Captain Paul R. Brown, Assistant-Surgeon, now at the Army and Navy General Hospital, Hot Springs, Arkansas, is relieved from station at Fort Thomas, Arizona, and will report in person to the commanding officer, Little Rock Barracks, Arkansas, for duty at that post, reporting by letter to the commanding general, Department of the Missouri. Par. 3, S. O. 84, A. G. O., April 10, 1890.

By direction of the Secretary of War, leave of absence for two months, on surgeon's certificate of disability, is granted Lieutenant-Colonel Joseph C. Bailey, Assistant Medical Purveyor, with authority for his admission to the Army and Navy General Hospital, Hot Springs, Arkansas, for treatment therein. Par. 10, S. O. 85, A. G. O., April 11, 1890.

Leave of absence for two months, on surgeon's certificate of disability, is hereby granted Major Passmore Middleton, Surgeon (St. Francis Barracks, Fla.). Par. 1, S. O. 85, Hdqrs. Div'n of the Atlantic, April 12, 1890.

By direction of the Acting Secretary of War, so much of Paragraph 2, S. O. 83, A. G. O., April 9, 1890, from this office, as directs the transfer of Captain William Stephenson, Assistant-Surgeon, from Fort Verde, Arizona, to David's Island, N. Y., is so amended as to substitute the words Columbus Barracks, Ohio, in place of David's Island. Par. 1, S. O. 89, A. G. O., Washington, D. C., April 16, 1890.

By direction of the Secretary of War, Major Washington Matthews, Surgeon, is relieved from duty in the Surgeon-General's office, this city, and will report in person to the commanding officer, Fort Wingate, New Mexico, for duty at that station. S. O. 90, Par. 6, A. G. O., Washington, April 17, 1890.

By direction of the Secretary of War, Major Peter J. A. Cleary, Surgeon, is relieved from duty at Fort Wingate, New Mexico, and will report in person to the commanding officer, Mount Vernon Barracks, Alabama, for duty at that station, and by letter to the commanding general, Division of the Atlantic. S. O. 90, Par. 6, A. G. O., Washington, April 17, 1890.

Changes in the Medical Corps of the U. S. Navy for the week ending April 19, 1890.

Beyer, H. G., Passed Assistant-Surgeon. Ordered to the U. S. S. "Yantic."

McCarty, Rufus H., Passed Assistant-Surgeon. Died April 12, with pneumonia, on the U. S. S. "Yantic," at Key West, Fla.

Official List of Changes of Stations and Duties of Medical Officers of the U.S. Marine Hospital Service for the two weeks ending April 19, 1890.

Fessenden, C. S. D., Surgeon. To proceed to Marion, Ky., on special duty. April 16, 1890.

Bailhache, P. H., Surgeon. Detailed as chairman of Board for physical examination of officers of Revenue Marine Service, April 12, 1890. To proceed to Portland, Oregon, Tacoma, Seattle, and Port Townsend, Wash., as inspector. April 16, 1890.

Hutton, W. H. H., Surgeon. Detailed as chairman of Board for physical examination of officers of Revenue Marine Service. April 10, 1890.

Long, W. H., Surgeon. To proceed to Marion, Ky., on special duty, relieving Surgeon Fessenden. April 18, 1890.

Kalloch, P. C., Passed Assistant-Surgeon. Detailed as recorder of Board for physical examination of officers of Revenue Marine Service, April 12, 1890.

Magruder, G. M., Assistant-Surgeon. Detailed as recorder of Board for physical examination of officers of Revenue Marine Service. April 10, 1890.

Guiteras, G. M., Assistant-Surgeon. To report to the Superintendent of Immigration, New York, for special duty. April 12, 1890.

Medical Index.

A weekly list of the more important and practical articles appearing in the contemporary foreign and domestic medical journals.

Abscess of bone, Lloyd. Prov. Med. Jour., April 1, 1890.
Abscess of spleen, Brinkerhoff. Med. Compend., April, '90.
Aneurism of the femoral artery, ligation of common femoral, French. Jour. Nat. Ass'n Railway Surg., March, 1890.
Asepsis in wound treatment economically applied, Allison. Med. Mirror, April, 1890.
Abscess of the antrum, Bryan. Virg. Med. Monthly, April.
Alkaloids in diseases of children, Morton. Weekly Med. Rev.
Approaching revision of U. S. Ph., Squibb. Ephemeris.
Accidents from electric currents, Knapp. Bos Med. Jour.
After-coming head, Brodnax. Covert Med. News, April, '90.
Acidum Trichloraceticum bei der Nase und des Rachens, Ehrmann. Med. Monatsschrift, April, 1890.
Aluminum in diphtheria, Dickenshied. Leh. Val. Med. Mag.
Autographisme et stigmates, Mesnet. Bull. de L'Acad. Med.
Ætiologie der Malaria, Plehn. Berl. Klin. Woch., 31 März.
Abdominal and pelvic surgery, Eastman. Ind. Med. Jour.
Acute rheumatic laryngitis, Simpson. Jour. Am. Med. Ass'n.
Abdominal sections in women, Taylor. Lancet, March 29, '90.
Audiatur et altera pars, Altschul. Prag. Med. Woch., 2 April.
Breast and axilla in cancer, Conant. Bos. Med. Surg. Jour.
Beitrag zur Ætiologie der Jackson'schen Epilepsie, Yamagiwa. Archiv f. Path., Anat. und Physiol., 5 März, 1890.
Beitrag zur Influenza-Epidemie in Prag, Petrina. Prager Med. Woch, 26 März, 1890.
Berichtigung zu meiner Mittheilung: "Ueber die Verdaulichkeit gekochter Milch," Randnitz. Zeits. für Phys. Chem.
Benzoesaureester der Kohlenhydrate, des Glykosamins und einiger Glykoside, Kueny. *Ibid.*
Convulsive seizures, Jackson. Brit. Med Jour., April 5, 1890.
Cerebral lesions, Pitt. *Ibid.*
Cerebral tumor, autopsy, Putnam. Bos. Med. and Surg. Jour.
Cerebral tumor, Beach. *Ibid.*
Carbolic acid gangrene, Warfield. Med. News, April 12, 1890.
Cardiac arhythmia. Patton. *Ibid.*
Consideration of sexual neurasthenia, Lewis. Am. Pract. News.
Clostridial nephritis, new variety of bacterial nephritis, Hopkins. Pacific Med. Jour., April, 1890.
Chronic rheumatic sore throat, Ingals. Jour. Laryng., April.
Condition of children in schools, Warner. Lancet, April 5.
Cheyne-Stokes respiration in chronic Bright's disease, Knaggs. *Ibid.*
Compound fractures involving joints, McCann. St. Louis Med. and Surg. Jour., April, 1890.
Contribution à l'étude du tetanos, Lagrange. Jour. de Med. de Bordeaux, 30 Mars, 1890.
Curettage de la muqueuse intra-uterine, Terrillon. Bull. Gen. de Therap., 30 Mars, 1890.
Cancer en Normandie, Arnaudet. La Norman. Med., 1 Avril.
Clinical applications of drugs, Stewart. N. Y. Med. Jour.
Cerebral lesions, Pitt. Brit. Med. Jour., March 22, 1890.
Chyluria with presence of filariæ, Slater. Lancet, March 29.
Causes of sudden death during and after labor, Trowbridge. Northwestern Lancet, April 15, 1890.
Der feinere Bau der normalen Lederhaut, Heitzmann. Archiv für Dermat. und Syphilis, 29 März, 1890.
Die venerischen Krankheiten in den Armeen, Topley. *Ibid.*
Diseases of Calhoun Co., Bell. Ala. Med. and Surg. Age.
De la mobilisation de l'etrier et discussion, Moure. Revue de Laryn., D'Otol., Avril, 1890.
Dei danni della malaria in Italia, Ruata. La Salute Pub.
De l'aeration permanente par la fenetre entr'ouverte, Nacaise. Bull. Gen. de Therap., 30 Mars, 1890.
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Du traitement abortif du furoncle, Jasiewicz. *Ibid.*
De la nature infectueuse de la blennorrhagie, Raynaud. *Ib.*
Error in sounding for stone, Browne. Prov. Med. Jour., April.
Etiology of croupous pneumonia, Jones. Northwest. Lancet.
Excision of head of femur for hip-joint diseases, Wyman. Med. Mirror, April, 1890.
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Erblichkeit der Tuberkulose und Verbreitung durch das Sputum, Haupt. Deutsche Med.-Zeitung, 10 April, 1890.
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Extraction of iron from eye by electro-magnet, Derby. Boston Med. Jour., April 17, 1890.
Etiology of diphtheria, Herbst. Leh. Val. Med. Mag., April.
Ein Fall von Entwicklung von Krebs des Magens auf der Basis eines runden Magengeschwüres, Brach. Wiener Med. Presse, 30 März, 1890.
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Early operation for hare-lip, Manley. N.Y. Med Jour., Apr. 12.
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Etiology and prevention of phthisis, Ransome. Med. Press.
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Foreign body in trachea, Murdoch. Med. Mirror, April, 1890.
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Fracture of skull, Porter. Bos. Med. and Surg. Jour., April 10.
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Fluorescein as a means of diagnosing lesions of cornea, Randolph. John Hopkins Hosp. Bull., April, 1890.
Gangrene of scrotum, recovery, Gibbon. Lancet, April 5, '90,
General paralysis of the insane, warnings of, Savage. Brit. Med. Jour., April 5, 1890.
High temperature in chronic joint-disease, Lovett. Boston Med. and Surg. Jour., April 17, 1890.
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Hydrastin und Hydrastinin, Falk. Archiv für Pathol. Anat. und Physiol., März, 1890.
Hair-pin in utero, Stevens. Obstetric Gaz., March, 1890.
Increment of animal heat, Woollcombe. Prov. Med. Jour.
Influenza epidemic of 1889–90, Moore. Dublin Jour. Med. Science, April 1, 1890.
Inversion of the uterus, Lowry. Tex. Cour. Rec. of Med., Ap.
Intestinal surgery, Shimwell. Med. News, April 12, 1890.
Immediate operation in punctured fracture of skull, Girdlestone. Austral. Med. Jour., Feb. 15, 1890.
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Ilium trephined for abscess, McGill. Lancet, April 5, 1890.
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